GenCore version 4.5

OM nucleic - nucleic search, using sw model

Run on: September 4, 2002, 11:29:56 ; Search time 596.48 Seconds
(without alignments)
5776.970 Million cell updates/sec

Title: US-09-052-089A-7
Perfect score: 2007
Sequence: 1 GTGCGGTGGAGCGAAATTTG.....AAAAAAAAAAAAAAAAAAAA 2007

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1736436 seqs, 858457221 residues

Total number of hits satisfying chosen parameters: 3472872

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_032802:*
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24: /SIDS5/gcgdata/geneseq/geneseqn-embl/NA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	1890.8	94.2	2065	20	AAX86754	cDNA 091-21A31 enc
	2	1887.6	94.1	2065	19	AAV29062	BRCA1 modulator pr
c	3	148	7.4	148	22	AAS27719	DNA encoding novel
	4	52	2.6	3489	21	AAA30290	Kaposi's sarcoma-a
	5	52	2.6	3489	22	AAF82901	Nucleotide sequenc
c	6	52	2.6	32207	20	AAV73805	KSHV LUR DNA (nucl
c	7	52	2.6	137507	19	AAV19941	KSHV long unique c
	8	51.8	2.6	4246	22	AAS60947	Human cancer agent
c	9	50	2.5	50	22	AAL30971	Human SNP oligonuc
	10	48.4	2.4	7453	22	AAI58369	Human polynucleoti
	11	48.4	2.4	7501	22	AAI58370	Human polynucleoti
	12	48.4	2.4	7741	22	AAI60155	Human polynucleoti
	13	48.4	2.4	7741	22	AAI60156	Human polynucleoti
	14	47.8	2.4	5154	23	AAS84859	DNA encoding novel
	15	47.2	2.4	2004	18	AAT85356	Nephila clavipes s
c	16	46.6	2.3	475	22	ABA58819	Human foetal liver
c	17	46.6	2.3	475	22	ABA27737	Probe #6203 for ge
c	18	46.6	2.3	475	22	AAK06973	Human brain expres
c	19	46.6	2.3	475	22	AAK32709	Human bone marrow
c	20	46.6	2.3	475	22	AAI38524	Probe #7210 used t
c	21	46.6	2.3	511	22	ABA71159	Human foetal liver
c	22	46.6	2.3	511	22	ABA37497	Probe #15963 for g
c	23	46.6	2.3	511	22	AAK19455	Human brain expres
c	24	46.6	2.3	511	22	AAK45444	Human bone marrow
c	25	46.6	2.3	511	22	AAI51389	Probe #20075 used
	26	45.8	2.3	4181	22	AAD06778	Human haematopoiet
	27	45.8	2.3	4801	22	AAD06781	Human haematopoiet
	28	45.2	2.3	1820	22	AAF58611	Human RECAP polynu
c	29	45	2.2	1824	23	AAS81488	DNA encoding novel
	30	45	2.2	2850	23	AAS79695	DNA encoding novel
c	31	44.4	2.2	267	22	AAK19599	Human brain expres
c	32	44.4	2.2	267	22	AAK45604	Human bone marrow
	33	44.2	2.2	693	23	AAS74240	DNA encoding novel
	34	44.2	2.2	693	23	AAS90715	DNA encoding novel
c	35	44.2	2.2	51259	18	AAX83007	Partial mouse WRN
	36	44	2.2	2601	23	ABL10151	Drosophila melanog
	37	44	2.2	2887	16	AAQ84589	AMML chromosome in
	38	44	2.2	4945	23	ABL10150	Drosophila melanog
	39	44	2.2	5064	23	ABL10438	Drosophila melanog
c	40	43.6	2.2	16442	18	AAX83006	Partial mouse WRN
	41	43.4	2.2	2243	22	ABA08657	Human extensin hom
	42	43.4	2.2	9679	21	AAD00768	Rat phosphodiester
	43	43.2	2.2	1440	23	ABL08945	Drosophila melanog
	44	43.2	2.2	7736	23	AAS65910	DNA encoding novel
	45	43.2	2.2	8486	22	AAK52971	Human polynucleoti

ALIGNMENTS

RESULT 1
AAX86754
ID AAX86754 standard; cDNA; 2065 BP.
XX
AC AAX86754;
XX
DT 27-OCT-1999 (first entry)
XX
DE cDNA 091-21A31 encoding a BRCA1 modulator protein.
XX
KW Modulator protein; BRCA1; tumour suppressor protein; breast cancer;
KW ovarian cancer; cell growth; cell proliferation; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 103..1512
FT /*tag= a
XX
PN US5948643-A.
XX
PD 07-SEP-1999.
XX
PF 13-AUG-1997; 97US-0968751.
XX
PR 13-AUG-1997; 97US-0968751.
XX
PA (ONYX-) ONYX PHARM INC.
XX
PI Lingenfelter C, Polakis PG, Rubinfeld B, Vuong TT;
XX
DR WPI; 1999-517952/43.

DR P-PSDB; AAY30149.
XX
PT Modulator proteins that bind to and modulate the activity of the
PT BRCA1 tumour suppressor gene product, useful for the treatment of
PT ovarian and breast cancer
XX
PS Claim 1; Fig 1; 35pp; English.
XX
CC The present sequence encodes a modulator protein, that binds to and
CC modulate the activity of the BRCA1 gene product (BRCA1). The BRCA1
CC protein has been characterized as a tumour suppressor protein.
CC Alterations in the amino acid sequence of BRCA1 causes breast and ovarian
CC cancers by removing the controls on cell growth and proliferation.
CC Research has shown that different regions on the BRCA1 molecule have
CC different effects on cell growth and tumour suppression (e.g. full length
CC truncated BRCA1 has no effect on breast cancer cell growth but will
CC inhibit ovarian cancer cell growth). It has been suggested that different
CC host cell factors (e.g. proteins) interact with different regions of the
CC BRCA1 to control its function. The identification of these proteins
CC (e.g. BRCA1MP) will facilitate the development of novel diagnostic
CC methods and new therapeutics for identifying and treating cancers caused
CC by changes in the expression or activity of BRCA1.
XX
SQ Sequence 2065 BP; 561 A; 526 C; 561 G; 417 T; 0 other;

Query Match 94.2%; Score 1890.8; DB 20; Length 2065;
Best Local Similarity 98.9%; Pred. No. 0;
Matches 1946; Conservative 0; Mismatches 17; Indels 5; Gaps 4;

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Qy    344 ATGAACTGGACAATGTCAGAGCCCAGCTTTCCCAGAAAGACAAGGAGAAACGAGACAGCC 403
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RESULT  2
AAV29062
ID   AAV29062 standard; cDNA; 2065 BP.
XX
AC   AAV29062;
XX
DT   28-AUG-1998  (first entry)
XX
DE   BRCA1 modulator protein 091-21A31 cDNA.
XX
KW   BRCA1 modulator protein; 091-21A31; breast cancer antigen 1;
KW   tumour suppressor protein; diagnosis; therapy; human; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             103..1512
FT                   /*tag= a
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PN   WO9810066-A1.
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PD   12-MAR-1998.
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PF   06-AUG-1997;   97WO-US13944.
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PR   04-SEP-1996;   96US-0025601.
XX
PA   (ONYX-) ONYX PHARM INC.
XX
PI   Ligenfelter C,  Polakis P,  Rubinfeld B,  Vuong TT;
XX
DR   WPI; 1998-193616/17.
DR   P-PSDB; AAW37881.
XX
PT   Breast cancer antigen 1 modulator protein - useful for diagnosing
PT   diseases involving unwanted cell growth, e.g. breast cancer, and for
PT   producing therapeutics for treatment of such diseases
XX
PS   Claim 5; Fig 1; 73pp; English.
XX
CC   This cDNA clone, designated 091-21A31 (ATCC 98141), codes for
CC   a 53 kDa BRCA1 modulator protein (see AAW37881) that binds to the
CC   tumour suppressor gene product BRCA1, and which is characterised by
CC   a zinc finger domain and a leucine zipper motif.  3 cDNA clones
CC   (see also AAV29063 and AAV29064) coding for BRCA1 modulator proteins
CC   (see AAW37881-83) were isolated from a HeLa cDNA library using a
CC   yeast two-hybrid assay with a GAL4-BRCA1(8-1293) fusion as bait.
CC   Vectors and host cells comprising the isolated nucleic acid
CC   sequences are claimed, as well as a process for producing BRCA1
CC   modulator protein by culturing these host cells.  BRCA1 modulator
CC   proteins and nucleic acids can be used to diagnose diseases
CC   involving unwanted cell growth, e.g. breast cancer, and to identify
CC   compounds that alter BRCA1 interaction with BRCA1 modulators for
CC   the treatment of such diseases.
XX
SQ   Sequence 2065 BP; 561 A; 528 C; 559 G; 417 T; 0 other;
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  Query Match             94.1%;  Score 1887.6;  DB 19;  Length 2065;
  Best Local Similarity   98.8%;  Pred. No. 0;
  Matches 1944;  Conservative    0;  Mismatches   19;  Indels    5;  Gaps    4;

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Qy    404 AGGTCATCATCGACACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCTC 463
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Db    404 aggtcatcatcgacactctgcgggatacgctggaagaacgcaatgctactgtggtatctc 463

Qy    464 TGCAGCAGGCCTTGGGCAAGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAGT 523
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Db    464 tgcagcaggccttgggcaaggccgagatgctgtgctccacactgaaaaagcagatgaagt 523

Qy    524 ACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGGA 583
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Db    524 acttagagcagcagcaggatgagaccaaacaagcacaagaggaggcccgccggctcagga 583

Qy    584 GCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTGG 643
          |||||||||||||||||||||||||||||||||||||||||||||| ||||||||||||
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Qy    644 AGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTGGAACAGCTGGCTGTGTACT 703
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Qy    764 TGGCTGACAAGCTGAGGAAGGATTTGTTTTCCTCCAGAAGCAAGTTGCAGACAGTCTACT 823
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Qy    944 CACCAGTGGCCAGTGAGACTGTCGACCGCCTGGTTTTAGAGAGCCCAGCCCCTGTGGAGG 1003
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Qy   1064 ATGTGGATACTCCCCCAGCCCGGCCCTCCAGCTCCCAGCATGGTTACTACGAAAAACTTT 1123
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Qy   1124 GCCTAGAGAAGTCACACTCCCCAATTCAGGATGTCCCCAAGAAGATATGCAAAGGCCCCA 1183
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Db   1124 gcctagagaagtcacactccccaattcaggatgtccccaagaagatatgcaaaggcccca 1183

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          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1184 ggaaggagtcccagctctcactgggtggccagagctgtgcaggagagccagatgaggaac 1243

Qy   1244 TGGTTGGTGCCTTCCCTATTTTTGTCCGGAATGCCATCCTAGGCCAGAAACAGCCCAAAA 1303
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||| |
Db   1244 tggttggtgccttccctatttttgtccggaatgccatcctaggccagaaacagcccaaga 1303

Qy   1304 GGCCCAGGTCAGAGTCCTCTTGCAGCAAAGATGTGGTAAGGACAGGCTTCGATGGGCTCG 1363
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1304 ggcccaggtcagagtcctcttgcagcaaagatgtggtaaggacaggcttcgatgggctcg 1363

Qy   1364 GTGGCCGGACAAAATTCATCCAGCCTACTGACACAGTCATGATCCGCCCATTGCCTGTTA 1423
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1364 gtggccggacaaaattcatccagcctactgacacagtcatgatccgcccattgcctgtta 1423

Qy   1424 AGCCCAAGACCAAGGTTAAGCAGAGGGTGAGGGTGAAGACCGTGCCTTCTCTCTTCCAGG 1483
          |||||||||||||||||||||||||||||||||||| ||||||||||||||||||||||
Db   1424 agcccaagaccaaggttaagcagagggtgagggtgaagacagtgccttctctcttccagg 1483

Qy   1484 CCAAGCTGGACACCTTCCTGTGGTCGTGAGAACAGTGAGTCTGACCAATGGCCAGACACA 1543
          |||||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1484 ccaagctgcacaccttcctgtggtcgtgagaacagtgagtctgaccaatggccagacaca 1543

Qy   1544 TGCCTGCAACTTGTAGGTCAAGGACTGTCCAGGCAGGG--TTTGTGGACAGAGCCCTACT 1601
          |||||||||||||||||||||||||||||||||||||  ||||||||||||||| |||
Db   1544 tgcctgcaacttgtaggtcaaggactgtccaggcagggg--ttttgtggacagagccccact 1603

Qy   1602 TTCGGGACCAGCCTGAGGTGTAAGGGCAGACAAACAGGTGAGGGTGAGTGTGACACCCAG 1661
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1604 ttcgggaccagcctgaggtgtaagggcagacaaacaggtgagggtgagtgtgacacccag 1663

Qy   1662 AGACTGCTCTTCCTGCCCTCACCCTGCCCCACTCCTACGACTGGGAGCTGACATGACCAG 1721
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1664 agactgctcttcctgccctcaccctgccccactcctacgactgggagctgacatgaccag 1723

Qy   1722 CCCACTGATCCTGTCAGCAGGTCCTGCT-CTGTTGCCAGGCTCTTGTTTATAGCCATGAT 1780
          |||||||||||||||||||||||||||| ||||||||||||| ||||||||||||||||
Db   1724 cccactgatcctgtcagcaggtcctgctcctgttgccaggctcctgtttatagccatgat 1783

Qy   1781 CAGATGTGGTCAGACTCTTTCTGGGCCTGGAGACCACGGTCACTTGTTGACTGTCTCTGT 1840
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1784 cagatgtggtcagactctttctgggcctggagaccacggtcacttgttgactgtctctgt 1843

Qy   1841 GGACCAGAGTGCTTGAGGCATCTCAGGCAGCCTCAGCCCAAGCTTCTACCTGCCTTTGAC 1900
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1844 ggaccagagtgcttgaggcatctcaggcagcctcagcccaagcttctacctgcctttgac 1903

Qy   1901 TTGCTTCTA-GCATAGCCTGGGCCAAGCAGGGTGGGGAATGGAGGATAGACATGGGATGT 1959
          |||||||||| |||||||||||||||||||||||||||||||||||| ||||||||||
Db   1904 ttgcttctaggcatagcctgggccaagcagggtggggaatggaggatag-catgggatgt 1962

Qy   1960 ATGGAGAGGATGGAAGATTTTCCCGAAAAAAAAAAAAAAAAAAAAAAA 2007
          |||||||||||||||||||  | |||| ||||  ||||||||||
Db   1963 atggagaggatggaagattttcatgtaaaataaaattaaaaaaaaaaa 2010


RESULT   3
AAS27719/c
ID   AAS27719 standard; DNA; 148 BP.
XX
AC   AAS27719;
XX
DT   07-NOV-2001  (first entry)

XX
DE   DNA encoding novel signal transduction pathway protein, Seq ID 1379.
XX
KW   Neuroprotective; cytostatic; dermatological; immunosuppressive; tumour;
KW   antiinflammatory; anti-HIV; antibacterial; antiinflammatory; cancer;
KW   immune system disorder; rheumatoid arthritis; inflammatory condition;
KW   organ transplant rejection; infection; hepatitis C; blood disorder;
KW   sickle cell anaemia; hyperproliferative disorder; Gaucher's disease;
KW   neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW   chromosomal abnormality; Down syndrome; ischaemia; renal disorder;
KW   cardiovascular; respiratory; wound healing; endocrine; Addison's disease;
KW   reproductive system; gastrointestinal; liver disorder; AIDS; ds;
KW   acquired immune deficiency syndrome.
XX
OS   Homo sapiens.
XX
PN   WO200154733-A1.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01312.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   24-FEB-2000; 2000US-0184664.
PR   02-MAR-2000; 2000US-0186350.
PR   16-MAR-2000; 2000US-0189874.
PR   17-MAR-2000; 2000US-0190076.
PR   18-APR-2000; 2000US-0198123.
PR   19-MAY-2000; 2000US-0205515.
PR   07-JUN-2000; 2000US-0209467.
PR   28-JUN-2000; 2000US-0214886.
PR   30-JUN-2000; 2000US-0215135.
PR   07-JUL-2000; 2000US-0216647.
PR   07-JUL-2000; 2000US-0216880.
PR   11-JUL-2000; 2000US-0217487.
PR   11-JUL-2000; 2000US-0217496.
PR   14-JUL-2000; 2000US-0218290.
PR   26-JUL-2000; 2000US-0220963.
PR   26-JUL-2000; 2000US-0220964.
PR   14-AUG-2000; 2000US-0224518.
PR   14-AUG-2000; 2000US-0224519.
PR   14-AUG-2000; 2000US-0225213.
PR   14-AUG-2000; 2000US-0225214.
PR   14-AUG-2000; 2000US-0225266.
PR   14-AUG-2000; 2000US-0225267.
PR   14-AUG-2000; 2000US-0225268.
PR   14-AUG-2000; 2000US-0225270.
PR   14-AUG-2000; 2000US-0225447.
PR   14-AUG-2000; 2000US-0225757.
PR   14-AUG-2000; 2000US-0225758.
PR   14-AUG-2000; 2000US-0225759.
PR   18-AUG-2000; 2000US-0226279.
PR   22-AUG-2000; 2000US-0226681.
PR   22-AUG-2000; 2000US-0226868.
PR   22-AUG-2000; 2000US-0227182.
PR   23-AUG-2000; 2000US-0227009.
PR   30-AUG-2000; 2000US-0228924.
PR   01-SEP-2000; 2000US-0229287.
PR   01-SEP-2000; 2000US-0229343.
PR   01-SEP-2000; 2000US-0229344.
PR   01-SEP-2000; 2000US-0229345.
PR   05-SEP-2000; 2000US-0229509.
PR   05-SEP-2000; 2000US-0229513.
PR   06-SEP-2000; 2000US-0230437.
PR   06-SEP-2000; 2000US-0230438.
PR   08-SEP-2000; 2000US-0231242.
PR   08-SEP-2000; 2000US-0231243.
PR   08-SEP-2000; 2000US-0231244.
PR   08-SEP-2000; 2000US-0231413.
PR   08-SEP-2000; 2000US-0231414.
PR   08-SEP-2000; 2000US-0232080.
PR   08-SEP-2000; 2000US-0232081.
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PR 12-SEP-2000; 2000US-0231968.
PR 14-SEP-2000; 2000US-0232397.
PR 14-SEP-2000; 2000US-0232398.
PR 14-SEP-2000; 2000US-0232399.
PR 14-SEP-2000; 2000US-0232400.
PR 14-SEP-2000; 2000US-0232401.
PR 14-SEP-2000; 2000US-0233063.
PR 14-SEP-2000; 2000US-0233064.
PR 14-SEP-2000; 2000US-0233065.
PR 21-SEP-2000; 2000US-0234223.
PR 21-SEP-2000; 2000US-0234274.
PR 25-SEP-2000; 2000US-0234997.
PR 25-SEP-2000; 2000US-0234998.
PR 26-SEP-2000; 2000US-0235484.
PR 27-SEP-2000; 2000US-0235834.
PR 27-SEP-2000; 2000US-0235836.
PR 29-SEP-2000; 2000US-0236327.
PR 29-SEP-2000; 2000US-0236367.
PR 29-SEP-2000; 2000US-0236368.
PR 29-SEP-2000; 2000US-0236369.
PR 29-SEP-2000; 2000US-0236370.
PR 02-OCT-2000; 2000US-0236802.
PR 02-OCT-2000; 2000US-0237037.
PR 02-OCT-2000; 2000US-0237038.
PR 02-OCT-2000; 2000US-0237039.
PR 02-OCT-2000; 2000US-0237040.
PR 13-OCT-2000; 2000US-0239935.
PR 13-OCT-2000; 2000US-0239937.
PR 20-OCT-2000; 2000US-0240960.
PR 20-OCT-2000; 2000US-0241221.
PR 20-OCT-2000; 2000US-0241785.
PR 20-OCT-2000; 2000US-0241786.
PR 20-OCT-2000; 2000US-0241787.
PR 20-OCT-2000; 2000US-0241808.
PR 20-OCT-2000; 2000US-0241809.
PR 20-OCT-2000; 2000US-0241826.
PR 01-NOV-2000; 2000US-0244617.
PR 08-NOV-2000; 2000US-0246474.
PR 08-NOV-2000; 2000US-0246475.
PR 08-NOV-2000; 2000US-0246476.
PR 08-NOV-2000; 2000US-0246477.
PR 08-NOV-2000; 2000US-0246478.
PR 08-NOV-2000; 2000US-0246523.
PR 08-NOV-2000; 2000US-0246524.
PR 08-NOV-2000; 2000US-0246525.
PR 08-NOV-2000; 2000US-0246526.
PR 08-NOV-2000; 2000US-0246527.
PR 08-NOV-2000; 2000US-0246528.
PR 08-NOV-2000; 2000US-0246532.
PR 08-NOV-2000; 2000US-0246609.
PR 08-NOV-2000; 2000US-0246610.
PR 08-NOV-2000; 2000US-0246611.
PR 08-NOV-2000; 2000US-0246613.
PR 17-NOV-2000; 2000US-0249207.
PR 17-NOV-2000; 2000US-0249208.
PR 17-NOV-2000; 2000US-0249209.
PR 17-NOV-2000; 2000US-0249210.
PR 17-NOV-2000; 2000US-0249211.
PR 17-NOV-2000; 2000US-0249212.
PR 17-NOV-2000; 2000US-0249213.
PR 17-NOV-2000; 2000US-0249214.
PR 17-NOV-2000; 2000US-0249215.
PR 17-NOV-2000; 2000US-0249216.
PR 17-NOV-2000; 2000US-0249217.
PR 17-NOV-2000; 2000US-0249218.
PR 17-NOV-2000; 2000US-0249244.
PR 17-NOV-2000; 2000US-0249245.
PR 17-NOV-2000; 2000US-0249264.
PR 17-NOV-2000; 2000US-0249265.
PR 17-NOV-2000; 2000US-0249297.
PR 17-NOV-2000; 2000US-0249299.
PR 17-NOV-2000; 2000US-0249300.
PR 01-DEC-2000; 2000US-0250160.
PR 01-DEC-2000; 2000US-0250391.
PR 05-DEC-2000; 2000US-0251030.
PR 05-DEC-2000; 2000US-0251988.
PR 05-DEC-2000; 2000US-0256719.
PR 06-DEC-2000; 2000US-0251479.
PR 08-DEC-2000; 2000US-0251856.
PR 08-DEC-2000; 2000US-0251868.
PR 08-DEC-2000; 2000US-0251869.
PR 08-DEC-2000; 2000US-0251989.
PR 08-DEC-2000; 2000US-0251990.
PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-465460/50.
XX
PT Novel polypeptides useful for diagnosing, treating, preventing and/or
PT prognosing disorders related to the proteins, including cancers, immune
PT disorders and neuronal disorders -
XX
PS Claim 1; SEQ ID No 1379; 880pp; English.
XX
CC The invention relates to novel isolated polypeptides (I), and
CC polynucleotides (II). (I), (II) and the antibody to (I) are useful for
CC diagnosing, preventing and treating diseases including immune system
CC disorders (e.g. congenital and acquired immunodeficiencies, autoimmune
CC disorders (e.g rheumatoid arthritis), inflammatory conditions, organ
CC transplant rejections and graft versus host disease, infectious diseases
CC (e.g. hepatitis C), bleeding disorders, haemoglobin abnormalities and
CC other blood-related disorders (sickle cell anaemia), myeloproliferative
CC disorders, primary haematopoietic disorders, hyperproliferative
CC disorders (e.g. Gaucher's disease and cancer), neurodegenerative
CC disorders (e.g. Alzheimer's disease, Parkinson's disease), chromosomal
CC abnormalities (Down syndrome), ischaemic injury (e.g. stroke), renal
CC disorders (e.g. glomerulonephritis), cardiovascular disorders
CC (e.g. arrhythmia), respiratory disorders, dermatological disorders, in
CC wound healing, epithelial cell proliferation, endocrine disorders (e.g.
CC Addison's disease), reproductive system disorders, gastrointestinal
CC disorder (inflammatory disorders), liver disorders (cirrhosis),
CC as stimulators of B-cell responsiveness to pathogens, activators of
CC T-cells, to induce higher affinity antibodies, and as a means to induce
CC tumour proliferation in pathologies e.g. acquired immune deficiency
CC syndrome (AIDS). AAS26976-AAS27850 represent novel signal transduction
CC pathway protein coding sequences and PCR primers of the invention.
XX
SQ Sequence 148 BP; 38 A; 33 C; 56 G; 21 T; 0 other;

Query Match 7.4%; Score 148; DB 22; Length 148;
Best Local Similarity 100.0%; Pred. No. 3e-30;
Matches 148; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 48 AAGCCGGACCTGTAGCAGTTTCTTTGGCTGCCTGGGCCCCTTGAGTCCAGCCATCATGCC 107
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 148 AAGCCGGACCTGTAGCAGTTTCTTTGGCTGCCTGGGCCCCTTGAGTCCAGCCATCATGCC 89

Qy 108 TATCCGTGCTCTGTGCACTATCTGCTCCGACTTCTTCGATCACTCCCGCGACGTGGCCGC 167
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 88 TATCCGTGCTCTGTGCACTATCTGCTCCGACTTCTTCGATCACTCCCGCGACGTGGCCGC 29

Qy 168 CATCCACTGCGGCCACACCTTCCACTTG 195
|||||||||||||||||||||||||||||
Db 28 CATCCACTGCGGCCACACCTTCCACTTG 1

RESULT 4
AAA30290
ID AAA30290 standard; DNA; 3489 BP.
XX
AC AAA30290;
XX

```
DT   11-SEP-2000  (first entry)
XX
DE   Kaposi's sarcoma-associated herpesvirus LANA gene.
XX
KW   Kaposi's sarcoma-associated herpesvirus; KSHV; rhadino virus;
KW   latency-associated nuclear antigen; LANA; gamma-2 herpes virus;
KW   Human herpes virus 8; HHV8; rhadino virus cis-acting element; RVCAE;
KW   Kaposi's sarcoma; primary effusion lymphoma; PEL;
KW   human immunodeficiency virus; HIV; multicentric Castleman's disease; ds.
XX
OS   Kaposi's sarcoma-associated herpesvirus.
XX
FH   Key             Location/Qualifiers
FT   CDS             1..3489
FT                   /*tag= a
FT                   /product= "LANA"
FT   misc_signal     40..50
FT                   /*tag= b
FT                   /note= "nuclear localisation signal, NLS"
FT   misc_signal     190..210
FT                   /*tag= c
FT                   /note= "nuclear localisation signal, NLS"
XX
PN   WO200029626-A1.
XX
PD   25-MAY-2000.
XX
PF   19-NOV-1999;   99WO-US27508.
XX
PR   19-NOV-1998;   98US-0109422.
PR   21-APR-1999;   99US-0298568.
XX
PA   (KIEF/) KIEFF E D.
PA   (BALL/) BALLESTAS M E.
PA   (KAYE/) KAYE K M.
XX
PI   Kieff ED,  Ballestas ME,  Kaye KM;
XX
DR   WPI; 2000-387829/33.
DR   P-PSDB; AAY96255.
XX
PT   Treating or preventing a disease associated with rhodino virus
PT   infection in a mammal which includes Kaposi's Sarcoma and Primary
PT   Effusion Lymphoma  -
XX
PS   Disclosure; Fig 6; 70pp; English.
XX
CC   The present sequence is the Kaposi's sarcoma-associated herpesvirus,
CC   (KSHV) latency-associated nuclear antigen (LANA) gene. KSHV is also known
CC   as Human Herpes Virus 8 (HHV8) and belongs to the rhadino virus, or
CC   gamma-2 herpes virus class. The LANA protein is necessary for the
CC   efficient persistence of rhadino virus DNA in mammalian cells. Persistent
CC   rhadino virus infection is implicated in a variety of diseases e.g.
CC   Kaposi's Sarcoma (KS), Primary Effusion Lymphoma (PEL) and multicentric
CC   Castleman's disease. In addition, KS is a common malignancy in HIV
CC   patients. KSHV persists in host cells in a latent form. One of the few
CC   genes expressed from the latent viral DNA is LANA. LANA associates with
CC   both human chromosomes and with the rhadino virus cis-acting element
CC   (RVCAE), thereby providing a tethering function: the KSHV DNA episome is
CC   "tied" to the host chromosomes. This allows the viral DNA to persist in
CC   the host cell. The present sequence may be used to screen and identify
CC   molecules that inhibit LANA interaction with RVCAE, thereby interfering
CC   with the latency cycle of this virus. Potential antiviral treatments for
CC   the above mentioned diseases may therefore be based on LANA deregulation.
XX
SQ   Sequence 3489 BP; 1053 A; 862 C; 1137 G; 437 T; 0 other;


  Query Match             2.6%;  Score 52;  DB 21;  Length 3489;
  Best Local Similarity   48.9%;  Pred. No. 0.0016;
  Matches  139;  Conservative    0;  Mismatches  145;  Indels    0;  Gaps    0;

Qy     505 CTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAG 564
           | | |  |||||  | || |    ||||||||||||| | ||     |  |    || |||
Db    2212 caggatgagcagcagcagcaggatgagcagcagcagcaggatgaacaggagcagcaggag 2271

Qy     565 GAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAG 624
           |||  ||  | ||    |    ||  | ||    | ||| ||   ||||      |  ||
Db    2272 gagcaggagcagcaggaggagcaggagcaggagttagaggagcaggagcaggagttagag 2331

Qy     625 AGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTG 684
             |||   |  ||| | ||||||  |   |  ||  | |  | |    ||   | | |
Db    2332 gatcaggagcaggagttagaggagcaggagcaggagttagaggagcaggagcaggagtta 2391

Qy     685 GAACAGCTGGCTGTGTACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCA 744
           ||  ||| ||    | | |  | |   |   || | ||||  ||| | |   |  |||
Db    2392 gaggagcaggagcaggagttagaggagcaggagcaggagttagaggagcaggagcaggag 2451

Qy     745 CGGAAGGCCTCAGGGGAGGTGGCTGACAAGCTGAGGAAGGATTT 788
             |||     | ||| |   ||  ||| |  | |||| ||
Db    2452 ttagaggagcaggagcaggagttagaggagcaggagcaggagtt 2495


RESULT   5
AAF82901
ID   AAF82901 standard; DNA; 3489 BP.
XX
AC   AAF82901;
XX
DT   29-JUN-2001  (first entry)
XX
DE   Nucleotide sequence of KSHV tethering protein, LANA.
XX
KW   Histone H1; tethering protein; LANA; gene therapy; multiple sclerosis;
KW   Parkinson's disease; Huntington disease; diabetes; human herpesvirus 8;
KW   KSHV; latency-associated nuclear antigen; LANA; ds.
XX
OS   Kaposi's sarcoma associated herpesvirus.
XX
FH   Key             Location/Qualifiers
FT   CDS             1..3489
FT                   /*tag= a
XX
PN   WO200125484-A2.
XX
PD   12-APR-2001.
XX
PF   29-SEP-2000; 2000WO-US26908.
XX
PR   01-OCT-1999;   99US-0410399.
XX
PA   (UNMI ) UNIV MICHIGAN.
XX
PI   Robertson ES,  Cotter MA;
XX
DR   WPI; 2001-281736/29.
DR   P-PSDB; AAB62331.
XX
PT   A composition for use in gene therapy comprises an expression vector
PT   that  includes a nucleic acid sequence encoding a nucleic acid binding
PT   protein  -
XX
PS   Disclosure; Fig 9A; 60pp; English.
XX
CC   The invention provides a composition comprising nucleic acid, histone H1
CC   protein and expression vector operationally encoding a protein suitable
CC   for tethering the nucleic acid to the histone H1 protein, where the
CC   tethering protein is LANA. The composition is useful in aiding the
CC   retention of the viral DNA in the host cell. The viral vector encodes a
CC   protein suitable for tethering DNA to Histone H1. Methods for screening
CC   for compounds which are agonistic or antagonistic for the tethering of
CC   viral proteins to histone H1 and DNA binding sites are useful for
CC   developing the method of viral transfer. The composition has applications
CC   to gene therapy, including the treatment of multiple sclerosis,
CC   Parkinson's disease, Huntington disease and diabetes. The present
CC   sequence represents the nucleotide sequence of the Kaposi's sarcoma
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CC   associated herpesvirus (human herpesvirus 8) latency-associated nuclear
CC   antigen (LANA), which acts as a tethering protein.
XX
SQ   Sequence 3489 BP; 1053 A; 862 C; 1137 G; 437 T; 0 other;


  Query Match             2.6%;  Score 52;  DB 22;  Length 3489;
  Best Local Similarity   48.9%;  Pred. No. 0.0016;
  Matches  139;  Conservative    0;  Mismatches  145;  Indels    0;  Gaps    0;

Qy     505 CTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAG 564
           | | |  |||||  | || |    ||||||||||||| | ||      |  |    || |||
Db    2212 caggatgagcagcagcagcaggatgagcagcagcagcaggatgaacaggagcagcaggag 2271

Qy     565 GAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAG 624
           |||  ||  | ||    |    ||  | ||    | ||| ||   ||||      |  ||
Db    2272 gagcaggagcagcaggaggagcaggagcaggagttagaggagcaggagcaggagttagag 2331

Qy     625 AGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTG 684
              |||   |  ||| | |||||| |   |  ||  | |  | |    ||   | | |
Db    2332 gatcaggagcaggagttagaggagcaggagcaggagttagaggagcaggagcaggagtta 2391

Qy     685 GAACAGCTGGCTGTGTACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCA 744
           ||  ||| ||    | | |  | |   |   || | ||||  ||| | |   |  |||
Db    2392 gaggagcaggagcaggagttagaggagcaggagcaggagttagaggagcaggagcaggag 2451

Qy     745 CGGAAGGCCTCAGGGGAGGTGGCTGACAAGCTGAGGAAGGATTT 788
             |||     | | ||| |   ||  ||| |  | |||| ||
Db    2452 ttagaggagcaggagcaggagttagaggagcaggagcaggagtt 2495


RESULT   6
AAV73805/c
ID   AAV73805 standard; DNA; 32207 BP.
XX
AC   AAV73805;
XX
DT   25-FEB-1999  (first entry)
XX
DE   KSHV LUR DNA (nucleotides 105,301-137,507).
XX
KW   Kaposi's sarcoma; acquired immune deficiency syndrome; AIDS; DHFR; Bcl-2;
KW   dihydrofolate reductase; LUR; long unique region; vaccine; prophylaxis;
KW   diagnosis; treatment; HHV8; capsid protein IV; tegument protein IV;
KW   glycoprotein; kaposin; cyclin D; immediate early protein; IEP; OX-2;
KW   v-adh; G-protein coupled receptor; FGARAT; ds.
XX
OS   Kaposi's sarcoma-associated herpesvirus.
XX
PN   US5849564-A.
XX
PD   15-DEC-1998.
XX
PF   29-NOV-1996;   96US-0770379.
XX
PR   29-NOV-1996;   96US-0770379.
XX
PA   (UYCO ) UNIV COLUMBIA NEW YORK.
XX
PI   Bohenzky RA,  Chang Y,  Edelman IS,  Moore PS,  Russo JJ;
XX
DR   WPI; 1999-069741/06.
XX
PT   Kaposi's sarcoma-associated herpes virus nucleic acid - encodes
PT   di:hydro:folate reductase and is useful for treatment, prophylaxis
PT   or diagnosis of Kaposi's sarcoma
XX
PS   Disclosure; Column 155-182; 109pp; English.
XX
CC   This sequence is a fragment of the Kaposi's sarcoma-associated
CC   herpesvirus (KSHV) LUR (long unique region). This fragment contains
CC   coding regions for ORF65 which encodes capsid protein IV, ORF66, ORF67
CC   which encodes tegument protein IV, ORF68 which encodes a glycoprotein,
CC   ORF69, K12 which encodes kaposin, K13, ORF72 which encodes cyclin D,
CC   ORF73 which encodes immediate early protein (IEP), K14 which encodes
CC   OX-2 (v-adh), ORF74 which encodes G-protein coupled receptor, ORF75
CC   which encodes tegument protein/FGARAT, K15. KSHV is a new human
CC   Herpesvirus (HHV8) believed to cause Kaposi's sarcoma (KS) which is the
CC   most common form of neoplasm occurring in persons with acquired immune
CC   deficiency syndrome (AIDS). The DHFR protein is useful for vaccination,
CC   prophylaxis, diagnosis and treatment of a subject with Kaposi's sarcoma
CC   and for detecting expression of a DNA virus associated with Kaposi's
CC   sarcoma in a cell.
XX
SQ   Sequence 32207 BP; 7229 A; 9156 C; 8713 G; 7109 T; 0 other;


  Query Match             2.6%;  Score 52;  DB 20;  Length 32207;
  Best Local Similarity   48.9%;  Pred. No. 0.0049;
  Matches  139;  Conservative    0;  Mismatches  145;  Indels    0;  Gaps    0;

Qy     505 CTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAG 564
           | | |  |||||  | || |    ||||||||||||| | ||      |  |    || |||
Db   19785 CAGGATGAGCAGCAGCAGCAGGATGAGCAGCAGCAGGATGAACAGGAGCAGCAGGAG 19726

Qy     565 GAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAG 624
           |||  ||  | ||    |    ||  | ||    | ||| ||   ||||      |  ||
Db   19725 GAGCAGGAGCAGCAGGAGGAGCAGGAGCAGGAGTTAGAGGAGCAGGAGCAGGAGTTAGAG 19666

Qy     625 AGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTG 684
              |||   |  ||| | ||||||  |   |  ||  | |  | |    ||   | | |
Db   19665 GATCAGGAGCAGGAGTTAGAGGAGCAGGAGCAGGAGTTAGAGGAGCAGGAGCAGGAGTTA 19606

Qy     685 GAACAGCTGGCTGTGTACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCA 744
           ||  ||| ||    | | |  | |   |   || | ||||  ||| | |   |  |||
Db   19605 GAGGAGCAGGAGCAGGAGTTAGAGGAGCAGGAGCAGGAGTTAGAGGAGCAGGAGCAGGAG 19546

Qy     745 CGGAAGGCCTCAGGGGAGGTGGCTGACAAGCTGAGGAAGGATTT 788
             |||     | | ||| |   ||  ||| |  | |||| ||
Db   19545 TTAGAGGAGCAGGAGCAGGAGTTAGAGGAGCAGGAGCAGGAGTT 19502


RESULT   7
AAV19941/c
ID   AAV19941 standard; DNA; 137507 BP.
XX
AC   AAV19941;
XX
DT   03-AUG-1998  (first entry)
XX
DE   KSHV long unique coding region and terminal repeat.
XX
KW   KSHV; HHV8; human herpes virus 8; macrophage inflammatory protein II;
KW   interleukin-6; IL-6; interferon regulatory factor; rheumatoid arthritis;
KW   complement-binding protein; glycoprotein; capsid protein IV; infection;
KW   immediate early protein; Kaposi's sarcoma; protective vaccine; lymphoma;
KW   lymphoproliferative disease; leukaemia; splenomegaly; mycosis fungoides;
KW   HIV immune status; anti-inflammatory agent; therapy; ds.
XX
OS   Kaposi's sarcoma-associated herpes virus.
XX
FH   Key             Location/Qualifiers
FT   CDS             1142..2794
FT                   /*tag= a
FT                   /product= complement-binding protein
FT   CDS             8699..11236
FT                   /*tag= b
FT                   /product= glycoprotein B
FT   CDS             complement (17261..17875)
FT                   /*tag= c
FT                   /product= interleukin 6
FT   CDS             complement (21548..21832)
FT                   /*tag= d
FT                   /product= macrophage inflammatory protein II
FT   CDS             complement (27137..27424)
FT                   /*tag= e
```

```
FT                   /product= interferon regulatory factor 1
FT   CDS             28661..29741
FT                   /*tag= f
FT                   /product= protein T1.1
FT   CDS             complement (58976..60175)
FT                   /*tag= g
FT                   /product= glycoprotein M
FT   CDS             complement (69412..69915)
FT                   /*tag= h
FT                   /product= glycoprotein L
FT   CDS             complement (88410..88910)
FT                   /*tag= i
FT                   /product= interferon regulatory factor 2
FT   CDS             89600..90541
FT                   /*tag= j
FT                   /product= interferon regulatory factor 3
FT   CDS             90173..90643
FT                   /*tag= k
FT                   /product= glycoprotein X
FT   CDS             complement (93636..94127)
FT                   /*tag= l
FT                   /product= interferon regulatory factor 4
FT   CDS             complement (111931..112443)
FT                   /*tag= m
FT                   /product= capsid protein IV
FT   CDS             complement (123808..127296)
FT                   /*tag= n
FT                   /product= immediate early protein
XX
PN   WO9804576-A1.
XX
PD   05-FEB-1998.
XX
PF   22-JUL-1997;    97WO-US13346.
XX
PR   29-NOV-1996;    96US-0757669.
PR   25-JUL-1996;    96US-0686243.
PR   25-JUL-1996;    96US-0686349.
PR   25-JUL-1996;    96US-0686350.
PR   25-JUL-1996;    96US-0687253.
PR   25-JUL-1996;    96US-0688814.
PR   05-SEP-1996;    96US-0708678.
PR   10-OCT-1996;    96US-0728323.
PR   13-NOV-1996;    96US-0747887.
PR   13-NOV-1996;    96US-0748640.
XX
PA   (UYCO ) UNIV COLUMBIA NEW YORK.
XX
PI   Bohenzky RA,  Chang Y,  Edelman IS,  Moore PS,  Russo JJ;
XX
DR   WPI; 1998-130615/12.
XX
PT   New nucleic acid encoding Kaposi's sarcoma associated herpes virus
PT   proteins - useful for, e.g. detecting levels of HHV8 in, and
PT   preparation of vaccines for treatment of, HIV patients
XX
PS   Example 2; Page 135-203; 230pp; English.
XX
CC   This sequence represents the long unique region and terminal repeat of
CC   the Kaposi's sarcoma-associated herpes virus (KSHV). KSHV is also known
CC   as human herpes virus 8 (HHV8). This sequence contains the DNAs of the
CC   invention which encode KSHV polypeptides selected from: (a) viral
CC   macrophage inflammatory protein (MIP) II; (b) viral interleukin-6 (IL-6);
CC   (c) viral IRF 1; (d) complement-binding protein; glycoproteins B, M or L;
CC   (d) capsid protein IV encoded by ORF65; and (e) immediate early protein
CC   encoded by ORF73. Labelled probes for the nucleic acid, proteins encoded
CC   by it, and antibodies (Ab) specific for the proteins are useful for
CC   detecting HHV8, specifically for diagnosis of Kaposi's sarcoma, in body
CC   fluids or tissue samples. HHV8 infections can be treated with antisense
CC   or triplex forming molecules or agents that bind specifically to the
CC   protein. Ab may be used for prophylaxis or treatment of HHV8 infection,
CC   while the protein can be used in protective vaccines. Ab may also be used
CC   to differentiate between lymphomas, and HHV8 may be implicated in many
CC   other lymphoproliferative diseases such as lymphomas, leukaemia,
CC   splenomegaly and mycosis fungoides. Cells and animals containing the
CC   nucleic acid are useful for drug screening. HHV8-derived peptides can be
CC   used as targets for antiviral drugs, e.g. dihydrofolate reductase gene
CC   can be inhibited with methotrexate. These can also be used to determine
CC   the immune status of a patient infected with HIV. HHV8 derived protein
CC   viral MIP III may be used as an anti-inflammatory agent for,
CC   e.g. treating rheumatoid arthritis. This sequence is stated as containing
CC   81 open reading frames.
XX
SQ   Sequence 137507 BP; 32579 A; 37795 C; 35758 G; 31375 T; 0 other;


  Query Match             2.6%;  Score 52;  DB 19;  Length 137507;
  Best Local Similarity   48.9%;  Pred. No. 0.0099;
  Matches  139;  Conservative    0;  Mismatches  145;  Indels    0;  Gaps    0;

Qy     505 CTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAG 564
           | | |  |||||  | || |    ||||||||||| | ||     |  |    || |||
Db  125085 CAGGATGAGCAGCAGCAGCAGGATGAGCAGCAGCAGCAGGATGAACAGGAGCAGCAGGAG 125026

Qy     565 GAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAG 624
           |||  ||  | ||     |    ||  | ||    | ||| ||   ||||       |  ||
Db  125025 GAGCAGGAGCAGCAGGAGGAGCAGGAGCAGGAGTTAGAGGAGCAGGAGCAGGAGTTAGAG 124966

Qy     625 AGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTG 684
             |||   |  ||| | ||||||  |   |  ||  | |  | |    ||   | | |
Db  124965 GATCAGGAGCAGGAGTTAGAGGAGCAGGAGCAGGAGTTAGAGGAGCAGGAGCAGGAGTTA 124906

Qy     685 GAACAGCTGGCTGTGTACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCA 744
           ||  ||| ||    | | |  | |    |   || | ||||  ||| | |   |  |||
Db  124905 GAGGAGCAGGAGCAGGAGTTAGAGGAGCAGGAGCAGGAGTTAGAGGAGCAGGAGCAGGAG 124846

Qy     745 CGGAAGGCCTCAGGGGAGGTGGCTGACAAGCTGAGGAAGGATTT 788
             |||     | | ||| |   ||  ||| |  | |||| ||
Db  124845 TTAGAGGAGCAGGAGCAGGAGTTAGAGGAGCAGGAGCAGGAGTT 124802


RESULT   8
AAS60947
ID   AAS60947 standard; cDNA; 4246 BP.
XX
AC   AAS60947;
XX
DT   29-JAN-2002  (first entry)
XX
DE   Human cancer agent-resistance marker #606.
XX
KW   Human; cancer cell marker; TAXOL; cytostatic; tumour; carcinoma;
KW   squamous cell carcinoma; sarcoma; fibrosarcoma; leukaemia;
KW   lymphocytic leukaemia; lymphoma; plasmocytoma; reticulum cell sarcoma;
KW   Hodgkin's disease; glioma; ss.
XX
OS   Homo sapiens.
XX
PN   WO200179556-A2.
XX
PD   25-OCT-2001.
XX
PF   13-APR-2001; 2001WO-US12132.
XX
PR   14-APR-2000; 2000US-197538P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lillie J,  Brown JL,  Bolt A,  Van Huffel C;
XX
DR   WPI; 2001-602933/68.
XX
PT   Novel nucleic acid, used as a marker to determine the effectiveness of
PT   using TAXOL to treat cancer cell growth in individuals -
XX
PS   Claim 1; Page 450-451; 527pp; English.
```

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XX
CC   The invention relates to 1046 novel nucleic acids which are used as
CC   markers for determining the sensitivity of a cancer cell to the
CC   anticancer agent TAXOL. Cancer cells can be treated with TAXOL when
CC   they are shown to express one of the 242 sensitivity markers or the
CC   cells are shown not to express one of the 804 resistance markers.
CC   The methods can be used to determine the effectiveness of TAXOL
CC   in the treatment of cancer cell growth in an individual. The markers
CC   can be used as targets in developing anti-cancer agents such as
CC   chemotherapeutic compounds. The markers can also be used as targets in
CC   developing treatments for cancer, particularly those cancers which
CC   display resistance to agents and exhibit expression of the markers. The
CC   anticancer agents developed by the novel method can be used to treat
CC   cancer. Probes based on the markers can be used to detect transcripts or
CC   genomic sequences corresponding to the markers, in the identification of
CC   cells or tissues which mis-express the protein. Cancers which may
CC   be targeted include carcinoma (e.g. squamous cell carcinoma),
CC   sarcoma (e.g. fibrosarcoma) leukaemia (e.g. lymphocytic leukaemia),
CC   lymphoma, plasmocytoma, reticulum cell sarcoma, Hodgkin's disease and
CC   tumours (e.g. glioma). The present sequence is one of the 1046
CC   novel cancer cell markers.
XX
SQ   Sequence 4246 BP; 1217 A; 1019 C; 1183 G; 827 T; 0 other;


  Query Match             2.6%;  Score 51.8;  DB 22;  Length 4246;
  Best Local Similarity   47.9%;  Pred. No. 0.002;
  Matches  149;  Conservative    0;  Mismatches  162;  Indels    0;  Gaps    0;

Qy     297 TCTTGCCCAGGAGGAGGAGAATGTCTTGGATCGAGAATTCTTAAAGAATGAACTGGACAA 356
           ||  |  ||| ||||||||| | |    ||   |  |   | |  ||||  || ||
Db     765 tcaggagcagcaggaggaggaggaggaggccaggaagaacctggagaagcaagtgctggc 824

Qy     357 TGTCAGAGCCCAGCTTTCCCAGAAAGACAAGGAGAAACGAGACAGCCAGGTCATCATCGA 416
             |     ||||| |  |  | |   | ||| |   |   |||  || ||  |  || ||
Db     825 cctgcagtcccagttggctgataccaagaagaaagtagatgacgacctgggaacaattga 884

Qy     417 CACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCTCTGCAGCAGGCCTT 476
            | ||||   ||  |   | |  | |           | ||   | |||   |||  | |
Db     885 aagtctggaagaagccaagaagaagcttctgaaggacgcggaggccctgagccagcgcct 944

Qy     477 GGGCAAGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCA 536
           ||   ||   |   ||  ||    || |||| | |||   | |||   | |  ||||| |
Db     945 ggaggagaaggcactggcgtatgacaaactggagaagaccaagaaccgcctgcagcagga 1004

Qy     537 GCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGAC 596
           || ||| ||   ||     |  |  ||  |   | ||| | ||     |||  || |||
Db    1005 gctggacgacctcacggtggacctggaccaccagcgccaggtcgcctccaacttggagaa 1064

Qy     597 CATGGAGCAGA 607
           | | || |||
Db    1065 gaagcagaaga 1075


RESULT   9
AAL30971/c
ID   AAL30971 standard; DNA; 50 BP.
XX
AC   AAL30971;
XX
DT   24-JAN-2002  (first entry)
XX
DE   Human SNP oligonucleotide #4179.
XX
KW   Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic;
KW   neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer;
KW   amyloid protein; angiopoietin; apoptosis related protein; cadherin;
KW   cyclin; polymerase; oncogene; histone; kinase; colony stimulating factor;
KW   complement related protein; cytochrome; kinesin; cytokine; interferon;
KW   interleukin; G-protein coupled receptor; thioesterase; inflammation;
KW   multifactorial disease; autoimmune disease; infection;
KW   nervous system disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200147944-A2.
XX
PD   05-JUL-2001.
XX
PF   28-DEC-2000; 2000WO-US35498.
XX
PR   28-DEC-1999;   99US-0173419.
PR   27-DEC-2000; 2000US-0173419.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Shimkets RA,  Leach M;
XX
DR   WPI; 2001-465210/50.
XX
PT   Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases,
PT   oncogenes and histones, useful for diagnosing and treating, e.g.
PT   cancer, autoimmune diseases and infections -
XX
PS   Claim 1; Page 2586; 4143pp; English.
XX
CC   The present invention relates to oligonucleotides encoding polymorphic
CC   variants of proteins related to amylases, amyloid proteins, angiopoietin,
CC   apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes,
CC   histones, kinases, colony stimulating factors, complement related
CC   proteins, cytochromes, kinesins, cytokines, interferons, interleukins,
CC   G-protein coupled receptors and thioesterases. The present sequence is
CC   one such oligonucleotide. The oligonucleotides and the peptides encoded
CC   by them may be used in the prevention, diagnosis and treatment of
CC   diseases associated with inappropriate expression of the proteins listed
CC   above. Disorders that may be prevented, diagnosed and/or treated include
CC   multifactorial diseases with a genetic component, such as autoimmune
CC   diseases (e.g. rheumatoid arthritis, multiple sclerosis, diabetes,
CC   systemic lupus erythromatosus and Grave's disease), inflammation, cancer
CC   (e.g. cancers of the bladder, brain, breast, colon and kidney,
CC   leukaemia), diseases of the nervous system and an infection of pathogenic
CC   organisms.
XX
SQ   Sequence 50 BP; 14 A; 14 C; 14 G; 8 T; 0 other;


  Query Match             2.5%;  Score 50;  DB 22;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 0.00071;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1885 TCTACCTGCCTTTGACTTGCTTCTAGCATAGCCTGGGCCAAGCAGGGTGG 1934
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db      50 TCTACCTGCCTTTGACTTGCTTCTAGCATAGCCTGGGCCAAGCAGGGTGG 1


RESULT  10
AAI58369
ID   AAI58369 standard; cDNA; 7453 BP.
XX
AC   AAI58369;
XX
DT   22-OCT-2001  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 572.
XX
KW   Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
KW   peripheral nervous system; neuropathy; central nervous system; CNS;
KW   Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
KW   amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
KW   chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
KW   leukaemia; ss.
XX
OS   Homo sapiens.
XX
PN   WO200153312-A1.
XX
```

PD 26-JUL-2001.
XX
PF 26-DEC-2000; 2000WO-US34263.
XX
PR 21-JAN-2000; 2000US-0488725.
PR 25-APR-2000; 2000US-0552317.
PR 09-JUL-2000; 2000US-0598042.
PR 19-JUL-2000; 2000US-0620312.
PR 03-AUG-2000; 2000US-0653450.
PR 14-SEP-2000; 2000US-0662191.
PR 19-OCT-2000; 2000US-0693036.
PR 29-NOV-2000; 2000US-0727344.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Asundi V, Chen R, Ma Y, Qian XB, Ren F, Wang D;
PI Wang J, Wang Z, Wehrman T, Xu C, Xue AJ, Yang Y, Zhang J;
PI Zhao QA, Zhou P, Goodrich R, Drmanac RT;
XX
DR WPI; 2001-442253/47.
DR P-PSDB; AAM39213.
XX
PT Novel nucleic acids and polypeptides, useful for treating disorders
PT such as central nervous system injuries -
XX
PS Claim 1; SEQ ID NO 572; 10078pp; English.
XX
CC The invention relates to human nucleic acids (AAI57798-AAI61369) and
CC the encoded polypeptides (AAM38642-AAM42213) with nootropic,
CC immunosuppressant and cytostatic activity. The polynucleotides are useful
CC in gene therapy. A composition containing a polypeptide or polynucleotide
CC of the invention may be used to treat diseases of the peripheral nervous
CC system, such as peripheral nervous injuries, peripheral neuropathy and
CC localised neuropathies and central nervous system diseases, such as
CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
CC lateral sclerosis, and Shy-Drager Syndrome. Other uses include the
CC utilisation of the activities such as: Immune system suppression,
CC Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
CC and thrombolytic activity, cancer diagnosis and therapy, drug screening,
CC assays for receptor activity, arthritis and inflammation, leukaemias and
CC C.N.S disorders.
CC Note: The sequence data for this patent did not form part of the printed
CC specification.
XX
SQ Sequence 7453 BP; 2253 A; 1656 C; 1983 G; 1561 T; 0 other;

Query Match 2.4%; Score 48.4; DB 22; Length 7453;
Best Local Similarity 47.4%; Pred. No. 0.023;
Matches 145; Conservative 0; Mismatches 161; Indels 0; Gaps 0;

```
Qy     297 TCTTGCCCAGGAGGAGGAGAATGTCTTGGATCGAGAATTCTTAAAGAATGAACTGGACAA 356
           ||  |  ||| ||||||||  | |    ||   |  |   | |  ||||  || ||
Db    4044 tcaggagcagcaggaggaggaggaggaggccaggaagaacctggagaagcaagtgctggc 4103

Qy     357 TGTCAGAGCCCAGCTTTCCCAGAAAGACAAGGAGAAACGAGACAGCCAGGTCATCATCGA 416
             |    ||||| |  |  | |   | ||| |   |   |||  || ||  |  || ||
Db    4104 cctgcagtcccagttggctgataccaagaagaaagtagatgacgacctgggaacaattga 4163

Qy     417 CACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCTCTGCAGCAGGCCTT 476
             | ||||   ||  |   | |  | |           | ||   | |||   |||  | |
Db    4164 aagtctggaagaagccaagaagaagcttctgaaggacgcggaggccctgagccagcgcct 4223

Qy     477 GGGCAAGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCA 536
           ||   ||   |   ||  ||    || |||| | |||   | |||   | |  ||||| |
Db    4224 ggaggagaaggcactggcgtatgacaaactggagaagaccaagaaccgcctgcagcagga 4283

Qy     537 GCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGAC 596
           || ||| ||   ||     |  |  ||  |   | ||| | ||     |||  || |||
Db    4284 gctggacgacctcacggtggacctggaccaccagcgccaggtcgcctccaacttggagaa 4343

Qy     597 CATGGA 602
             | | |
```

Db 4344 gaagca 4349

RESULT 11
AAI58370
ID AAI58370 standard; cDNA; 7501 BP.
XX
AC AAI58370;
XX
DT 22-OCT-2001 (first entry)
XX
DE Human polynucleotide SEQ ID NO 573.
XX
KW Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
KW peripheral nervous system; neuropathy; central nervous system; CNS;
KW Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
KW amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
KW chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
KW leukaemia; ss.
XX
OS Homo sapiens.
XX
PN WO200153312-A1.
XX
PD 26-JUL-2001.
XX
PF 26-DEC-2000; 2000WO-US34263.
XX
PR 21-JAN-2000; 2000US-0488725.
PR 25-APR-2000; 2000US-0552317.
PR 09-JUL-2000; 2000US-0598042.
PR 19-JUL-2000; 2000US-0620312.
PR 03-AUG-2000; 2000US-0653450.
PR 14-SEP-2000; 2000US-0662191.
PR 19-OCT-2000; 2000US-0693036.
PR 29-NOV-2000; 2000US-0727344.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Asundi V, Chen R, Ma Y, Qian XB, Ren F, Wang D;
PI Wang J, Wang Z, Wehrman T, Xu C, Xue AJ, Yang Y, Zhang J;
PI Zhao QA, Zhou P, Goodrich R, Drmanac RT;
XX
DR WPI; 2001-442253/47.
DR P-PSDB; AAM39214.
XX
PT Novel nucleic acids and polypeptides, useful for treating disorders
PT such as central nervous system injuries -
XX
PS Claim 1; SEQ ID NO 573; 10078pp; English.
XX
CC The invention relates to human nucleic acids (AAI57798-AAI61369) and
CC the encoded polypeptides (AAM38642-AAM42213) with nootropic,
CC immunosuppressant and cytostatic activity. The polynucleotides are useful
CC in gene therapy. A composition containing a polypeptide or polynucleotide
CC of the invention may be used to treat diseases of the peripheral nervous
CC system, such as peripheral nervous injuries, peripheral neuropathy and
CC localised neuropathies and central nervous system diseases, such as
CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
CC lateral sclerosis, and Shy-Drager Syndrome. Other uses include the
CC utilisation of the activities such as: Immune system suppression,
CC Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
CC and thrombolytic activity, cancer diagnosis and therapy, drug screening,
CC assays for receptor activity, arthritis and inflammation, leukaemias and
CC C.N.S disorders.
CC Note: The sequence data for this patent did not form part of the printed
CC specification.
XX
SQ Sequence 7501 BP; 2268 A; 1668 C; 1994 G; 1571 T; 0 other;

Query Match 2.4%; Score 48.4; DB 22; Length 7501;
Best Local Similarity 47.4%; Pred. No. 0.023;

```
  Matches  145;  Conservative    0;  Mismatches  161;  Indels    0;  Gaps    0;

Qy     297 TCTTGCCCAGGAGGAGGAGAATGTCTTGGATCGAGAATTCTTAAAGAATGAACTGGACAA 356
           ||  |  ||| |||||||| | |    ||   |  |   | |  ||||  || ||
Db    4092 tcaggagcagcaggaggaggaggaggaggccaggaagaacctggagaagcaagtgctggc 4151

Qy     357 TGTCAGAGCCCAGCTTTCCCAGAAAGACAAGGAGAAACGAGACAGCCAGGTCATCATCGA 416
             |     ||||| |  |  | |   | ||| |   |   |||  || ||  |  || ||
Db    4152 cctgcagtcccagttggctgataccaagaagaaagtagatgacgacctgggaacaattga 4211

Qy     417 CACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCTCTGCAGCAGGCCTT 476
           | ||||   ||  |   | |  | |           | ||   | |||   |||  | |
Db    4212 aagtctggaagaagccaagaagaagcttctgaaggacgcggaggccctgagccagcgcct 4271

Qy     477 GGGCAAGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCA 536
           ||   ||   |   ||  ||    || |||| | |||   | |||   | |  ||||| |
Db    4272 ggaggagaaggcactggcgtatgacaaactggagaagaccaagaaccgcctgcagcagga 4331

Qy     537 GCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGAC 596
           || ||| ||   ||     |  |  ||  |   | ||| | ||     |||  || |||
Db    4332 gctggacgacctcacggtggacctggaccaccagcgccaggtcgcctccaacttggagaa 4391

Qy     597 CATGGA 602
           | | |
Db    4392 gaagca 4397


RESULT  12
AAI60155
ID   AAI60155 standard; cDNA; 7741 BP.
XX
AC   AAI60155;
XX
DT   22-OCT-2001  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 4144.
XX
KW   Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
KW   peripheral nervous system; neuropathy; central nervous system; CNS;
KW   Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
KW   amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
KW   chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
KW   leukaemia; ss.
XX
OS   Homo sapiens.
XX
PN   WO200153312-A1.
XX
PD   26-JUL-2001.
XX
PF   26-DEC-2000; 2000WO-US34263.
XX
PR   21-JAN-2000; 2000US-0488725.
PR   25-APR-2000; 2000US-0552317.
PR   09-JUL-2000; 2000US-0598042.
PR   19-JUL-2000; 2000US-0620312.
PR   03-AUG-2000; 2000US-0653450.
PR   14-SEP-2000; 2000US-0662191.
PR   19-OCT-2000; 2000US-0693036.
PR   29-NOV-2000; 2000US-0727344.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Asundi V,  Chen R,  Ma Y,  Qian XB,  Ren F,  Wang D;
PI   Wang J,  Wang Z,  Wehrman T,  Xu C,  Xue AJ,  Yang Y,  Zhang J;
PI   Zhao QA,  Zhou P,  Goodrich R,  Drmanac RT;
XX
DR   WPI; 2001-442253/47.
DR   P-PSDB; AAM40999.
XX
PT   Novel nucleic acids and polypeptides, useful for treating disorders
PT   such as central nervous system injuries -
XX
PS   Claim 1; SEQ ID NO 4144; 10078pp; English.
XX
CC   The invention relates to human nucleic acids (AAI57798-AAI61369) and
CC   the encoded polypeptides (AAM38642-AAM42213) with nootropic,
CC   immunosuppressant and cytostatic activity. The polynucleotides are useful
CC   in gene therapy. A composition containing a polypeptide or polynucleotide
CC   of the invention may be used to treat diseases of the peripheral nervous
CC   system, such as peripheral nervous injuries, peripheral neuropathy and
CC   localised neuropathies and central nervous system diseases, such as
CC   Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
CC   lateral sclerosis, and Shy-Drager Syndrome. Other uses include the
CC   utilisation of the activities such as: Immune system suppression,
CC   Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
CC   and thrombolytic activity, cancer diagnosis and therapy, drug screening,
CC   assays for receptor activity, arthritis and inflammation, leukaemias and
CC   C.N.S disorders.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification.
XX
SQ   Sequence 7741 BP; 2303 A; 1751 C; 2080 G; 1606 T; 1 other;


  Query Match             2.4%;  Score 48.4;  DB 22;  Length 7741;
  Best Local Similarity   47.4%;  Pred. No. 0.023;
  Matches  145;  Conservative    0;  Mismatches  161;  Indels    0;  Gaps    0;

Qy     297 TCTTGCCCAGGAGGAGGAGAATGTCTTGGATCGAGAATTCTTAAAGAATGAACTGGACAA 356
           ||  |  ||| |||||||| | |    ||   |  |   | |  ||||  || ||
Db    4195 tcaggagcagcaggaggaggaggaggaggccaggaagaacctggagaagcaagtgctggc 4254

Qy     357 TGTCAGAGCCCAGCTTTCCCAGAAAGACAAGGAGAAACGAGACAGCCAGGTCATCATCGA 416
             |     ||||| |  |  | |   | ||| |   |   |||  || ||  |  || ||
Db    4255 cctgcagtcccagttggctgataccaagaagaaagtagatgacgacctgggaacaattga 4314

Qy     417 CACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCTCTGCAGCAGGCCTT 476
           | ||||   ||  |   | |  | |           | ||   | |||   |||  | |
Db    4315 aagtctggaagaagccaagaagaagcttctgaaggacgcggaggccctgagccagcgcct 4374

Qy     477 GGGCAAGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCA 536
           ||   ||   |   ||  ||    || |||| | |||   |.|||   | |  ||||| |
Db    4375 ggaggagaaggcactggcgtatgacaaactggagaagaccaagaaccgcctgcagcagga 4434

Qy     537 GCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGAC 596
           || ||| ||   ||     |  |  ||  |   | ||| | ||     |||  || |||
Db    4435 gctggacgacctcacggtggacctggaccaccagcgccaggtcgcctccaacttggagaa 4494

Qy     597 CATGGA 602
           | | |
Db    4495 gaagca 4500


RESULT  13
AAI60156
ID   AAI60156 standard; cDNA; 7741 BP.
XX
AC   AAI60156;
XX
DT   22-OCT-2001  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 4145.
XX
KW   Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
KW   peripheral nervous system; neuropathy; central nervous system; CNS;
KW   Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
KW   amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
KW   chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
KW   leukaemia; ss.
XX
OS   Homo sapiens.
XX
PN   WO200153312-A1.
XX
PD   26-JUL-2001.
```

```
XX
PF   26-DEC-2000; 2000WO-US34263.
XX
PR   21-JAN-2000; 2000US-0488725.
PR   25-APR-2000; 2000US-0552317.
PR   09-JUL-2000; 2000US-0598042.
PR   19-JUL-2000; 2000US-0620312.
PR   03-AUG-2000; 2000US-0653450.
PR   14-SEP-2000; 2000US-0662191.
PR   19-OCT-2000; 2000US-0693036.
PR   29-NOV-2000; 2000US-0727344.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Asundi V,  Chen R,  Ma Y,  Qian XB,  Ren F,  Wang D;
PI   Wang J,  Wang Z,  Wehrman T,  Xu C,  Xue AJ,  Yang Y,  Zhang J;
PI   Zhao QA,  Zhou P,  Goodrich R,  Drmanac RT;
XX
DR   WPI; 2001-442253/47.
DR   P-PSDB; AAM41000.
XX
PT   Novel nucleic acids and polypeptides, useful for treating disorders
PT   such as central nervous system injuries -
XX
PS   Claim 1; SEQ ID NO 4145; 10078pp; English.
XX
CC   The invention relates to human nucleic acids (AAI57798-AAI61369) and
CC   the encoded polypeptides (AAM38642-AAM42213) with nootropic,
CC   immunosuppressant and cytostatic activity. The polynucleotides are useful
CC   in gene therapy. A composition containing a polypeptide or polynucleotide
CC   of the invention may be used to treat diseases of the peripheral nervous
CC   system, such as peripheral nervous injuries, peripheral neuropathy and
CC   localised neuropathies and central nervous system diseases, such as
CC   Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
CC   lateral sclerosis, and Shy-Drager Syndrome. Other uses include the
CC   utilisation of the activities such as: Immune system suppression,
CC   Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
CC   and thrombolytic activity, cancer diagnosis and therapy, drug screening,
CC   assays for receptor activity, arthritis and inflammation, leukaemias and
CC   C.N.S disorders.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification.
XX
SQ   Sequence 7741 BP; 2303 A; 1751 C; 2080 G; 1606 T; 1 other;


  Query Match             2.4%;  Score 48.4;  DB 22;  Length 7741;
  Best Local Similarity   47.4%;  Pred. No. 0.023;
  Matches  145;  Conservative    0;  Mismatches  161;  Indels    0;  Gaps    0;

Qy     297 TCTTGCCCAGGAGGAGGAGAATGTCTTGGATCGAGAATTCTTAAAGAATGAACTGGACAA 356
           ||  |  ||| ||||||||| | |    ||   |  |   | |  ||||  || ||
Db    4195 tcaggagcagcaggaggaggaggaggaggccaggaagaacctggagaagcaagtgctggc 4254

Qy     357 TGTCAGAGCCCAGCTTTCCCAGAAAGACAAGGAGAAACGAGACAGCCAGGTCATCATCGA 416
             |     ||||| |  |  | |    | ||| |    |   |||  || ||  |  || ||
Db    4255 cctgcagtcccagttggctgataccaagaagaaagtagatgacgacctgggaacaattga 4314

Qy     417 CACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCTCTGCAGCAGGCCTT 476
             | ||||   ||  |   | |  | |           | ||   | |||   |||  | |
Db    4315 aagtctggaagaagccaagaagaagcttctgaaggacgcggaggccctgagccagcgcct 4374

Qy     477 GGGCAAGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCA 536
           ||   ||   |   ||  ||    || |||| | |||   | |||   | |  ||||| |
Db    4375 ggaggagaaggcactggcgtatgacaaactggagaagaccaagaaccgcctgcagcagga 4434

Qy     537 GCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGAC 596
           || ||| ||   ||      |  |  ||  |   | ||| | ||     |||  || |||
Db    4435 gctggacgacctcacggtggacctggaccaccagcgccaggtcgcctccaacttggagaa 4494

Qy     597 CATGGA 602
             | | |
Db    4495 gaagca 4500
```

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RESULT  14
AAS84859
ID   AAS84859 standard; cDNA; 5154 BP.
XX
AC   AAS84859;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #20663.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG20672.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity  -
XX
PS   Claim 1; SEQ ID No 20663; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and
CC   polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC   polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC   and gene mapping, and in recombinant production of (II). The
CC   polynucleotides are also used in diagnostics as expressed sequence tags
CC   for identifying expressed genes. (I) is useful in gene therapy techniques
CC   to restore normal activity of (II) or to treat disease states involving
CC   (II). (II) is useful for generating antibodies against it, detecting or
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human
CC   diagnostic coding sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 5154 BP; 1544 A; 1236 C; 1478 G; 896 T; 0 other;


  Query Match             2.4%;  Score 47.8;  DB 23;  Length 5154;
  Best Local Similarity   49.5%;  Pred. No. 0.027;
  Matches  152;  Conservative    0;  Mismatches  152;  Indels    3;  Gaps    1;

Qy     482 AGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGG 541
           ||   |||| |   |  |||  ||| ||||| ||||||    |  | | || ||  || |
Db     500 agctggagaggagcttgtccgaactcaaaaaccagatgggtaagatggggctgctacaag 559
```

```
Qy    542 ATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGG 601
          ||||| |||||||        ||||||  ||   | ||   | | ||| |  |  ||  ||
Db    560 atgaggccaaacacctgaggcaggaggtggaaggtctggagggaaagctccaatcccagg 619

Qy    602 AGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACA 661
            | | |   | |      |      ||    |   ||     || |||   |||  ||
Db    620 tggaaaacaatcaggccttgagtctccttagcaaggaacaaaagcagagactccaggagc 679

Qy    662 TGGGTGTGGGACAGTCAGCGGTGGAACAGCTGGCTGTGT---ACTGTGTGTCTCTCAAGA 718
            ||  | |   |    || |  |||   || |   |||    |    | |   ||
Db    680 aggaggagatgctccgagagcaggaggtgcagagagtgcgggagcaggagagactgtgtg 739

Qy    719 AAGAGTACGAGAATCTAAAAGAGGCACGGAAGGCCTCAGGGGAGGTGGCTGACAAGCTGA 778
          || |  ||||||  ||    |||   | |||| |   |  ||||  || ||| | ||||
Db    740 aacaaaacgagaggcttcgggagcagcagaagacgctacaggagcagggtgagaggctgc 799

Qy    779 GGAAGGA 785
          | ||| |
Db    800 gaaagca 806
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```
RESULT 15
AAT85356
ID   AAT85356 standard; DNA; 2004 BP.
XX
AC   AAT85356;
XX
DT   09-DEC-1997  (first entry)
XX
DE   Nephila clavipes spider silk protein 2 Kb DNA sequence.
XX
KW   High strength film; fibre; woven article; parachutes; sails;
KW   absorber; body armour; heavy metal; biological weapon; chemical;
KW   flavour; fragrance; Nephila clavipes; ss.
XX
OS   Nephila clavipes.
XX
FH   Key             Location/Qualifiers
FT   CDS             40..1980
FT                   /*tag= a
FT                   /product= Silk_protein
XX
PN   WO9708315-A1.
XX
PD   06-MAR-1997.
XX
PF   22-AUG-1996;   96WO-US13767.
XX
PR   22-AUG-1995;   95US-0517694.
XX
PA   (BASE/) BASEL R M.
PA   (ELIO/) ELION G R.
XX
PI   Basel RM,  Elion GR;
XX
DR   WPI; 1997-179272/16.
DR   P-PSDB; AAW27178.
XX
PT   New opt. multimerised DNA sequences encoding spider silk protein -
PT   contg. both repetitive and non-repetitive sequences, useful for
PT   making high strength films, fibres, woven articles etc.
XX
PS   Claim 14; Fig 1; 57pp; English.
XX
CC   A process has been developed for the production of a DNA fragment
CC   encoding silk protein. The process involves: (a) selecting target DNA,
CC   from a silk-producing spider, that contains many repetitive and non-
CC   repetitive regions; (b) selecting a single-stranded DNA primer of at
CC   least 10 nucleotides with a sequence that is complementary to a region
CC   of the target; (c) repetitively combining the primer with melted target
CC   DNA, incubating the mixture with nucleotides and a DNA polymerase with
CC   proofreading activity to produce a DNA fragment which is complementary
CC   to the target and is at least 2 kb long. The present sequence
CC   represents a 2 Kb DNA sequence which encodes the spider silk protein
CC   from Nephila clavipes. The DNA fragment can be used to make fibres,
CC   films, woven articles, e.g. for use in parachutes, sails, body armour,
CC   and absorbers (e.g. of heavy metals, biological weapons, DNA, chemicals,
CC   flavours and fragrances). The high molecular weight (90-250 kD) of
CC   spider silk proteins can be produced on a commercial scale (at over
CC   2 g/l cell mass). It has better tensile strength and elasticity than
CC   silkworm silk. Inclusion of both repetitive and non-repetitive regions
CC   ensures isolation of stable clones.
XX
SQ   Sequence 2004 BP; 481 A; 386 C; 791 G; 346 T; 0 other;
```

```
  Query Match             2.4%;  Score 47.2;  DB 18;  Length 2004;
  Best Local Similarity   46.6%;  Pred. No. 0.025;
  Matches  219;  Conservative    0;  Mismatches  248;  Indels    3;  Gaps    2;

Qy    463 CTGCAGCAGGCCTTGGGCAAGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAG 522
          | || | |||    || |||||  ||   | ||  |      ||| | ||| || || ||
Db    959 cagctggaggtgccggacaaggaggactaggtggacaaggtgctggacaaggagctggag 1018

Qy    523 TACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGGAGG-CGGGCCGGCTCAG 581
          |      |||||||| ||  | | |  |  | |   |   |||||  |  |    |  ||
Db   1019 cagccgctgcagcagctggtggtgccggacaaggaggatatggaggtcttggaaaccaag 1078

Qy    582 GAGCAAGATGA--AGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAG 639
          | ||  || ||   |  || || |||| |  |||  |  |  |||    || | |  ||
Db   1079 gtgctggacgaggtggacaaggtgcaggtgcagcagcagcagcagctggaggtgctggac 1138

Qy    640 GTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTGGAACAGCTGGCTGTG 699
            |||||| |||            |    ||  |||   | ||||||  || |||    |
Db   1139 aaggaggatatggaggtcttggaagccaaggtgcaggacgaggtggattaggtggacaag 1198

Qy    700 TACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCACGGAAGGCCTCAGGG 759
              |||   |  || | ||  |||   ||  |  |||     | ||       |
Db   1199 gtgcaggtgcagcagcagcagctggaggtgctggacaaggaggatacggtggtcttg 1258

Qy    760 GAGGTGGCTGACAAGCTGAGGAAGGATTTGTTTTCCTCCAGAAGCAAGTTGCAGACAGTC 819
          | ||     |    |  | | ||| | ||     ||    |  |||| | | |   |
Db   1259 gtggacaaggtgccggacaaggaggctatggaggacttggaagccaaggttctggtcgag 1318

Qy    820 TACTCTGAATTGGATCAGGCCAAGTTAGAACTGAAGTCAGCCCAGAAGGACTTACAGAGT 879
          |   | |  ||||  |||   || | | | | ||      | | |||   |  | |
Db   1319 gaggattaggtggacaaggtgcaggtgcagcagcagcagctggaggtgctggacaag 1378

Qy    880 GCTGACAAGGAAATCATGAGCCTGAAAAAGAAGCTAACGATGCTGCAGGA 929
          |  ||  |||    || |   ||| | ||| ||||   |  || || | |
Db   1379 gaggattaggtggacaaggtgctggacaaggagctggagcagccgctgca 1428
```

```
RESULT 16
ABA58819/c
ID   ABA58819 standard; DNA; 475 BP.
XX
AC   ABA58819;
XX
DT   01-FEB-2002  (first entry)
XX
DE   Human foetal liver single exon nucleic acid probe #7124.
XX
KW   Human; foetal liver; gene expression; single exon nucleic acid probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157277-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00669.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
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```
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483447/52.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human fetal liver -
XX
PS   Claim 1; SEQ ID NO 7124; 639pp + sequence listing; English.
XX
CC   The invention relates to a single exon nucleic acid probe for
CC   measuring human gene expression in a sample derived from human foetal
CC   liver. The single exon nucleic acid probes may be used for predicting,
CC   measuring and displaying gene expression in samples derived from human
CC   fetal liver. The present sequence is a single exon nucleic acid
CC   probe of the invention.
CC   Note: The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 475 BP; 38 A; 198 C; 45 G; 194 T; 0 other;


  Query Match             2.3%;  Score 46.6;  DB 22;  Length 475;
  Best Local Similarity   52.9%;  Pred. No. 0.018;
  Matches  100;  Conservative    0;  Mismatches   89;  Indels    0;  Gaps    0;

Qy     502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
           | || ||| |||  || |||| |    ||| || || |||| ||||   || | |   ||
Db     364 AAACAGAAGAAGAGGAAGAAGGAGAAGGAGAAGGAGGAGGAGGAGAAGGAAGAGGAGAAA 305

Qy     562 GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
           ||||||| ||    |   | ||  |||| |||||  | | || |||  |||
Db     304 GAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGGAGGAGGAGGAG 245

Qy     622 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG 681
            ||    ||      |||  | || ||| ||      | | ||  | ||   |    | |
Db     244 GAGGAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGGAAGAGGAGAAAGAGGAG 185

Qy     682 GTGGAACAG 690
           | |||  ||
Db     184 GAGGAGGAG 176


RESULT  17
ABA27737/c
ID   ABA27737 standard; DNA; 475 BP.
XX
AC   ABA27737;
XX
DT   23-JAN-2002  (first entry)
XX
DE   Probe #6203 for gene expression analysis in human heart cell sample.
XX
KW   Human; gene expression; heart; microarray; vascular system; probe;
KW   cardiovascular disease; hypertension; cardiac arrhythmia;
KW   congenital heart disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157274-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00666.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488899/53.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   hearts -
XX
PS   Claim 1; SEQ ID No 6203; 530pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes for
CC   measuring human gene expression in a sample derived from human heart. The
CC   present sequence is one such probe. The probes may be used for
CC   predicting, measuring and displaying gene expression in samples derived
CC   from the human heart via microarrays. By measuring gene expression, the
CC   probes are useful for predicting, diagnosing, grading, staging,
CC   monitoring and prognosing diseases of the human heart and vascular system
CC   e.g. cardiovascular disease, hypertension, cardiac arrhythmias and
CC   congenital heart disease.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 475 BP; 38 A; 198 C; 45 G; 194 T; 0 other;


  Query Match             2.3%;  Score 46.6;  DB 22;  Length 475;
  Best Local Similarity   52.9%;  Pred. No. 0.018;
  Matches  100;  Conservative    0;  Mismatches   89;  Indels    0;  Gaps    0;

Qy     502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
           | || ||| |||  || |||| |    ||| || || |||| ||||   || | |   ||
Db     364 AAACAGAAGAAGAGGAAGAAGGAGAAGGAGAAGGAGGAGGAGGAGAAGGAAGAGGAGAAA 305

Qy     562 GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
           ||||||| ||    |   | ||  |||| |||||  | | || |||  |||
Db     304 GAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGGAGGAGGAGGAG 245

Qy     622 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG 681
            ||    ||      |||  | || ||| ||      | | ||  | ||   |    | |
Db     244 GAGGAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGGAAGAGGAGAAAGAGGAG 185

Qy     682 GTGGAACAG 690
           | |||  ||
Db     184 GAGGAGGAG 176


RESULT  18
AAK06973/c
ID   AAK06973 standard; DNA; 475 BP.
XX
AC   AAK06973;
XX
DT   05-NOV-2001  (first entry)
XX
DE   Human brain expressed single exon probe SEQ ID NO: 6964.
XX
KW   Human; brain expressed exon; gene expression analysis; probe;
KW   microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
KW   epilepsy; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157275-A2.
XX
```

PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US00667.
XX
PR 04-FEB-2000; 2000US-0180312.
PR 26-MAY-2000; 2000US-0207456.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-483446/52.
XX
PT Single exon nucleic acid probes for analyzing gene expression in human
PT brains -
XX
PS Example 4; SEQ ID NO: 6964; 650pp + Sequence Listing; English.
XX
CC The present invention provides a number of single exon nucleic acid
CC probes which are derived from genomic sequences expressed in the human
CC brain. They can be used to measure gene expression in brain cell samples,
CC which may enable the diagnosis and improved treatment of nervous system
CC diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC epilepsy and cancers. The present sequence is one of the probes of the
CC invention.
XX
SQ Sequence 475 BP; 38 A; 198 C; 45 G; 194 T; 0 other;

Query Match 2.3%; Score 46.6; DB 22; Length 475;
Best Local Similarity 52.9%; Pred. No. 0.018;
Matches 100; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

Qy 502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
Db 364 AAACAGAAGAAGAGGAAGAAGGAGAAGGAGAAGGAGGAGGAGGAGAAGGAAGAGGAGAAA 305

Qy 562 GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
Db 304 GAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGGAGGAGGAGGAG 245

Qy 622 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG 681
Db 244 GAGGAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGGAAGAGGAGAAAGAGGAG 185

Qy 682 GTGGAACAG 690
Db 184 GAGGAGGAG 176

RESULT 19
AAK32709/c
ID AAK32709 standard; DNA; 475 BP.
XX
AC AAK32709;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human bone marrow expressed single exon probe SEQ ID NO: 7266.
XX
KW Human; bone marrow expressed exon; gene expression analysis; probe;
KW microarray; cancer; leukaemia; lymphoma; myeloma; ss.
XX
OS Homo sapiens.
XX
PN WO200157276-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US00668.
XX
PR 04-FEB-2000; 2000US-0180312.
PR 26-MAY-2000; 2000US-0207456.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488900/53.
XX
PT Human genome-derived single exon nucleic acid probes useful for
PT analyzing gene expression in human bone marrow -
XX
PS Example 4; SEQ ID NO: 7266; 658pp + Sequence Listing; English.
XX
CC The present invention provides a number of single exon nucleic acid
CC probes which are derived from genomic sequences expressed in the human
CC bone marrow. They can be used to measure gene expression in bone marrow
CC samples, which may enable the improved diagnosis and treatment of cancers
CC such as lymphoma, leukaemia and myeloma. The present sequence is one of
CC the probes of the invention.
XX
SQ Sequence 475 BP; 38 A; 198 C; 45 G; 194 T; 0 other;

Query Match 2.3%; Score 46.6; DB 22; Length 475;
Best Local Similarity 52.9%; Pred. No. 0.018;
Matches 100; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

Qy 502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
Db 364 AAACAGAAGAAGAGGAAGAAGGAGAAGGAGAAGGAGGAGGAGGAGAAGGAAGAGGAGAAA 305

Qy 562 GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
Db 304 GAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGGAGGAGGAGGAG 245

Qy 622 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG 681
Db 244 GAGGAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGGAAGAGGAGAAAGAGGAG 185

Qy 682 GTGGAACAG 690
Db 184 GAGGAGGAG 176

RESULT 20
AAI38524/c
ID AAI38524 standard; DNA; 475 BP.
XX
AC AAI38524;
XX
DT 17-OCT-2001 (first entry)
XX
DE Probe #7210 used to measure gene expression in human placenta sample.
XX
KW Probe; microarray; human; placenta; antenatal diagnosis;
KW genetic disorder; ss.
XX
OS Homo sapiens.
XX
PN WO200157272-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US00663.

```
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488897/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human placenta -
XX
PS   Claim 25; SEQ ID No 7210; 654pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes (SENP).
CC   The present sequence is one such probe. The probes are useful for
CC   producing a microarray for predicting, measuring and displaying gene
CC   expression in samples derived from human placenta. The probes are useful
CC   for antenatal diagnosis of human genetic disorders.
XX
SQ   Sequence 475 BP; 38 A; 198 C; 45 G; 194 T; 0 other;


  Query Match             2.3%;  Score 46.6;  DB 22;  Length 475;
  Best Local Similarity   52.9%;  Pred. No. 0.018;
  Matches  100;  Conservative    0;  Mismatches   89;  Indels    0;  Gaps    0;

Qy     502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
           | || ||| |||  || |||| |    ||| || || |||| ||||   || | |   ||
Db     364 AAACAGAAGAAGAGGAAGAAGGAGAAGGAGAAGGAGGAGGAGGAGAAGGAAGAGGAGAAA 305

Qy     562 GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
           ||||||| ||    |   | ||  |||| |||||  | | || |||  |||
Db     304 GAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGAAGGAGGAGGAGGAG 245

Qy     622 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG 681
            ||    ||     |||  | || ||| ||      | | ||  | ||   |    | |
Db     244 GAGGAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGGAAGAGGAGAAAGAGGAG 185

Qy     682 GTGGAACAG 690
           | |||  ||
Db     184 GAGGAGGAG 176


RESULT  21
ABA71159/c
ID   ABA71159 standard; DNA; 511 BP.
XX
AC   ABA71159;
XX
DT   01-FEB-2002  (first entry)
XX
DE   Human foetal liver single exon nucleic acid probe #19464.
XX
KW   Human; foetal liver; gene expression; single exon nucleic acid probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157277-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00669.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483447/52.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human fetal liver -
XX
PS   Claim 4; SEQ ID NO 19464; 639pp + sequence listing; English.
XX
CC   The invention relates to a single exon nucleic acid probe for
CC   measuring human gene expression in a sample derived from human foetal
CC   liver. The single exon nucleic acid probes may be used for predicting,
CC   measuring and displaying gene expression in samples derived from human
CC   fetal liver. The present sequence is a single exon nucleic acid
CC   probe of the invention.
CC   Note: The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 511 BP; 19 A; 231 C; 26 G; 235 T; 0 other;


  Query Match             2.3%;  Score 46.6;  DB 22;  Length 511;
  Best Local Similarity   52.9%;  Pred. No. 0.019;
  Matches  100;  Conservative    0;  Mismatches   89;  Indels    0;  Gaps    0;

Qy     502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
           | || ||| |||  || |||| |    ||| || || |||| ||||   || | |   ||
Db     267 AAACAGAAGAAGAGGAAGAAGGAGAAGGAGAAGGAGGAGGAGGAGAAGGAAGAGGAGAAA 208

Qy     562 GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
           ||||||| ||    |   | ||  |||| |||||  | | || |||  |||
Db     207 GAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGGAGGAGGAGGAG 148

Qy     622 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG 681
            ||    ||     |||  | || ||| ||      | | ||  | ||   |    | |
Db     147 GAGGAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGGAAGAGGAGAAAGAGGAG 88

Qy     682 GTGGAACAG 690
           | |||  ||
Db      87 GAGGAGGAG 79


RESULT  22
ABA37497/c
ID   ABA37497 standard; DNA; 511 BP.
XX
AC   ABA37497;
XX
DT   23-JAN-2002  (first entry)
XX
DE   Probe #15963 for gene expression analysis in human heart cell sample.
XX
KW   Human; gene expression; heart; microarray; vascular system; probe;
KW   cardiovascular disease; hypertension; cardiac arrhythmia;
KW   congenital heart disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157274-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00666.
XX
PR   04-FEB-2000; 2000US-0180312.
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PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488899/53.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   hearts -
XX
PS   Claim 4; SEQ ID No 15963; 530pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes for
CC   measuring human gene expression in a sample derived from human heart. The
CC   present sequence is one such probe. The probes may be used for
CC   predicting, measuring and displaying gene expression in samples derived
CC   from the human heart via microarrays. By measuring gene expression, the
CC   probes are useful for predicting, diagnosing, grading, staging,
CC   monitoring and prognosing diseases of the human heart and vascular system
CC   e.g. cardiovascular disease, hypertension, cardiac arrhythmias and
CC   congenital heart disease.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 511 BP; 19 A; 231 C; 26 G; 235 T; 0 other;


  Query Match             2.3%;  Score 46.6;  DB 22;  Length 511;
  Best Local Similarity   52.9%;  Pred. No. 0.019;
  Matches  100;  Conservative    0;  Mismatches   89;  Indels    0;  Gaps    0;

Qy    502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
          | || ||| |||  || |||| |    ||| || || |||| ||||   || | |   ||
Db    267 AAACAGAAGAAGAGGAAGAAGGAGAAGGAGAAGGAGGAGGAGGAGAAGGAAGAGGAGAAA 208

Qy    562 GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
          ||||||| ||    |   | ||  |||| |||||  | | || |||  |||
Db    207 GAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGGAGGAGGAGGAG 148

Qy    622 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG 681
            ||    ||      |||  | || ||| ||      | | ||  | ||   |    | |
Db    147 GAGGAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGGAAGAGGAGAAAGAGGAG 88

Qy    682 GTGGAACAG 690
          | |||  ||
Db     87 GAGGAGGAG 79


RESULT  23
AAK19455/c
ID   AAK19455 standard; DNA; 511 BP.
XX
AC   AAK19455;
XX
DT   05-NOV-2001  (first entry)
XX
DE   Human brain expressed single exon probe SEQ ID NO: 19446.
XX
KW   Human; brain expressed exon; gene expression analysis; probe;
KW   microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
KW   epilepsy; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157275-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00667.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483446/52.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   brains -
XX
PS   Example 4; SEQ ID NO: 19446; 650pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   brain. They can be used to measure gene expression in brain cell samples,
CC   which may enable the diagnosis and improved treatment of nervous system
CC   diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC   epilepsy and cancers. The present sequence is one of the probes of the
CC   invention.
XX
SQ   Sequence 511 BP; 19 A; 231 C; 26 G; 235 T; 0 other;


  Query Match             2.3%;  Score 46.6;  DB 22;  Length 511;
  Best Local Similarity   52.9%;  Pred. No. 0.019;
  Matches  100;  Conservative    0;  Mismatches   89;  Indels    0;  Gaps    0;

Qy    502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
          | || ||| |||  || |||| |    ||| || || |||| ||||   || | |   ||
Db    267 AAACAGAAGAAGAGGAAGAAGGAGAAGGAGAAGGAGGAGGAGGAGAAGGAAGAGGAGAAA 208

Qy    562 GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
          ||||||| ||    |   | ||  |||| |||||  | | || |||  |||
Db    207 GAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGGAGGAGGAGGAG 148

Qy    622 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG 681
            ||    ||      |||  | || ||| ||      | | ||  | ||   |    | |
Db    147 GAGGAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGGAAGAGGAGAAAGAGGAG 88

Qy    682 GTGGAACAG 690
          | |||  ||
Db     87 GAGGAGGAG 79


RESULT  24
AAK45444/c
ID   AAK45444 standard; DNA; 511 BP.
XX
AC   AAK45444;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human bone marrow expressed single exon probe SEQ ID NO: 20001.
XX
KW   Human; bone marrow expressed exon; gene expression analysis; probe;
KW   microarray; cancer; leukaemia; lymphoma; myeloma; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157276-A2.
XX
PD   09-AUG-2001.
```

```
XX
PF   30-JAN-2001; 2001WO-US00668.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488900/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human bone marrow -
XX
PS   Example 4; SEQ ID NO: 20001; 658pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   bone marrow. They can be used to measure gene expression in bone marrow
CC   samples, which may enable the improved diagnosis and treatment of cancers
CC   such as lymphoma, leukaemia and myeloma. The present sequence is one of
CC   the probes of the invention.
XX
SQ   Sequence 511 BP; 19 A; 231 C; 26 G; 235 T; 0 other;


  Query Match             2.3%;  Score 46.6;  DB 22;  Length 511;
  Best Local Similarity   52.9%;  Pred. No. 0.019;
  Matches  100;  Conservative    0;  Mismatches   89;  Indels    0;  Gaps    0;

Qy     502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
           | || ||| |||  || |||| |    ||| || || |||| ||||   || | |   ||
Db     267 AAACAGAAGAAGAGGAAGAAGGAGAAGGAGAAGGAGGAGGAGGAGAAGGAAGAGGAGAAA 208

Qy     562 GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
           ||||||| ||    |   | ||  |||| |||||  | | || |||  |||
Db     207 GAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGAAGGAGGAGGAGGAG 148

Qy     622 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG 681
            ||    ||      |||  | || ||| ||      | | ||  | ||   |    | |
Db     147 GAGGAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGGAAGAGGAGAAAGAGGAG 88

Qy     682 GTGGAACAG 690
           | |||  ||
Db      87 GAGGAGGAG 79


RESULT  25
AAI51389/c
ID   AAI51389 standard; DNA; 511 BP.
XX
AC   AAI51389;
XX
DT   17-OCT-2001  (first entry)
XX
DE   Probe #20075 used to measure gene expression in human placenta sample.
XX
KW   Probe; microarray; human; placenta; antenatal diagnosis;
KW   genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157272-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00663.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488897/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human placenta -
XX
PS   Claim 25; SEQ ID No 20075; 654pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes (SENP).
CC   The present sequence is one such probe. The probes are useful for
CC   producing a microarray for predicting, measuring and displaying gene
CC   expression in samples derived from human placenta. The probes are useful
CC   for antenatal diagnosis of human genetic disorders.
XX
SQ   Sequence 511 BP; 19 A; 231 C; 26 G; 235 T; 0 other;


  Query Match             2.3%;  Score 46.6;  DB 22;  Length 511;
  Best Local Similarity   52.9%;  Pred. No. 0.019;
  Matches  100;  Conservative    0;  Mismatches   89;  Indels    0;  Gaps    0;

Qy     502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
           | || ||| |||  || |||| |    ||| || || |||| ||||   || | |   ||
Db     267 AAACAGAAGAAGAGGAAGAAGGAGAAGGAGAAGGAGGAGGAGGAGAAGGAAGAGGAGAAA 208

Qy     562 GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
           ||||||| ||    |   | ||  |||| |||||  | | || |||  |||
Db     207 GAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGAAGAAGGAGGAGGAGGAG 148

Qy     622 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG 681
            ||    ||      |||  | || ||| ||      | | ||  | ||   |    | |
Db     147 GAGGAGGAGGAGGAGGAGAAGAAGAAGAAGAAGAAGAAGGAAGAGGAGAAAGAGGAG 88

Qy     682 GTGGAACAG 690
           | |||  ||
Db      87 GAGGAGGAG 79


RESULT  26
AAD06778
ID   AAD06778 standard; cDNA; 4181 BP.
XX
AC   AAD06778;
XX
DT   06-AUG-2001  (first entry)
XX
DE   Human haematopoietic lineage switch (HLS)-5 cDNA #1.
XX
KW   Human; haematopoietic lineage switch; HLS-5; tumour suppressor; cancer;
KW   ring finger B-box coiled-coil; RBCC; transcriptional regulator; tumour;
KW   acute myeloid leukaemia; drug screening; gene therapy; cytostatic; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             2..1516
FT                   /*tag= a
FT                   /product= "Human HLS-5 protein"
FT                   /note= "CDS does not include start codon"
FT                   /partial
XX
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PN   WO200138374-A1.
XX
PD   31-MAY-2001.
XX
PF   24-NOV-2000; 2000WO-AU01439.
XX
PR   24-NOV-1999;   99AU-0004216.
XX
PA   (UYWA-) UNIV WESTERN AUSTRALIA.
XX
PI   Klinken SP,  Lalonde J,  Williams JH;
XX
DR   WPI; 2001-367663/38.
DR   P-PSDB; AAE02617.
XX
PT   Novel tumor suppressor gene, HLS-5, useful for regulating cell growth
PT   and treating a condition characterized by aberrant cell growth  -
XX
PS   Claim 1; Page 102-103; 111pp; English.
XX
CC   The present invention relates to a tumour suppressor gene, termed
CC   haematopoietic lineage switch (HLS)-5 and the protein it encodes.
CC   HLS-5 is a member of ring finger B-box coiled-coil (RBCC) family of
CC   transcriptional regulators. HLS-5 exhibits tumour suppressor activities
CC   in acute myeloid leukaemia and breast cancer cells. HLS-5 DNA, protein
CC   and its Ab are useful for treating a condition characterised by aberrant
CC   cell growth. HLS-5 DNA and protein are useful to identify a substance
CC   capable of affecting HLS-5 function, or capable of modulating cell
CC   growth. HLS-5 DNA and protein sequences are useful for diagnosing and
CC   treating tumours and cancers. HLS-5 polypeptides are also useful for
CC   screening drugs for treating diseases. HLS-5 DNA is used in gene therapy.
CC   The present sequence is a cDNA encoding human HLS-5.
XX
SQ   Sequence 4181 BP; 880 A; 1055 C; 1126 G; 1120 T; 0 other;


  Query Match             2.3%;  Score 45.8;  DB 22;  Length 4181;
  Best Local Similarity   59.7%;  Pred. No. 0.086;
  Matches   77;  Conservative    0;  Mismatches   52;  Indels    0;  Gaps    0;

Qy     128 TCTGCTCCGACTTCTTCGATCACTCCCGCGACGTGGCCGCCATCCACTGCGGCCACACCT 187
           ||||| ||| || || ||| | || ||||||||  | | |  | | ||||||||||| ||
Db      93 tctgcgccgtctgctacgacccctccgcgacgcagtcactctgcgctgcggccacaact 152

Qy     188 TCCACTTGCAGTGCCTAATTCAGTCCTTTGAGACAGCACCAAGTCGGACCTGCCCACAGT 247
           ||  |     |||| | |  |  | ||  |||           |  |||||||||  ||
Db     153 tctgccgcgggtgcgtgagccgctgctgggaggtgcaggtgtcgcccacctgcccagtgt 212

Qy     248 GCCGAATCC 256
           ||  |  ||
Db     213 gcaaagacc 221


RESULT  27
AAD06781
ID   AAD06781 standard; cDNA; 4801 BP.
XX
AC   AAD06781;
XX
DT   06-AUG-2001  (first entry)
XX
DE   Human haematopoietic lineage switch (HLS)-5 cDNA #2.
XX
KW   Human; haematopoietic lineage switch; HLS-5; tumour suppressor; cancer;
KW   ring finger B-box coiled-coil; RBCC; transcriptional regulator; tumour;
KW   acute myeloid leukaemia; drug screening; gene therapy; cytostatic; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             655..2136
FT                   /*tag= a
FT                   /product= "Human HLS-5 protein"
XX
PN   WO200138374-A1.
XX
PD   31-MAY-2001.
XX
PF   24-NOV-2000; 2000WO-AU01439.
XX
PR   24-NOV-1999;   99AU-0004216.
XX
PA   (UYWA-) UNIV WESTERN AUSTRALIA.
XX
PI   Klinken SP,  Lalonde J,  Williams JH;
XX
DR   WPI; 2001-367663/38.
DR   P-PSDB; AAE02618.
XX
PT   Novel tumor suppressor gene, HLS-5, useful for regulating cell growth
PT   and treating a condition characterized by aberrant cell growth  -
XX
PS   Example; Page 106-108; 111pp; English.
XX
CC   The present invention relates to a tumour suppressor gene, termed
CC   haematopoietic lineage switch (HLS)-5 and the protein it encodes.
CC   HLS-5 is a member of ring finger B-box coiled-coil (RBCC) family of
CC   transcriptional regulators. HLS-5 exhibits tumour suppressor activities
CC   in acute myeloid leukaemia and breast cancer cells. HLS-5 DNA, protein
CC   and its Ab are useful for treating a condition characterised by aberrant
CC   cell growth. HLS-5 DNA and protein are useful to identify a substance
CC   capable of affecting HLS-5 function, or capable of modulating cell
CC   growth. HLS-5 DNA and protein sequences are useful for diagnosing and
CC   treating tumours and cancers. HLS-5 polypeptides are also useful for
CC   screening drugs for treating diseases. HLS-5 DNA is used in gene therapy.
CC   The present sequence is a cDNA encoding human HLS-5.
XX
SQ   Sequence 4801 BP; 999 A; 1256 C; 1308 G; 1238 T; 0 other;


  Query Match             2.3%;  Score 45.8;  DB 22;  Length 4801;
  Best Local Similarity   59.7%;  Pred. No. 0.092;
  Matches   77;  Conservative    0;  Mismatches   52;  Indels    0;  Gaps    0;

Qy     128 TCTGCTCCGACTTCTTCGATCACTCCCGCGACGTGGCCGCCATCCACTGCGGCCACACCT 187
           ||||| ||| || || ||| | || ||||||||  | | |  | | ||||||||||| ||
Db     713 tctgcgccgtctgctacgacccctccgcgacgcagtcactctgcgctgcggccacaact 772

Qy     188 TCCACTTGCAGTGCCTAATTCAGTCCTTTGAGACAGCACCAAGTCGGACCTGCCCACAGT 247
           ||  |     |||| | |  |  | ||  |||           |  |||||||||  ||
Db     773 tctgccgcgggtgcgtgagccgctgctgggaggtgcaggtgtcgcccacctgcccagtgt 832

Qy     248 GCCGAATCC 256
           ||  |  ||
Db     833 gcaaagacc 841


RESULT  28
AAF58611
ID   AAF58611 standard; cDNA; 1820 BP.
XX
AC   AAF58611;
XX
DT   24-APR-2001  (first entry)
XX
DE   Human RECAP polynucleotide, SEQ ID NO: 39.
XX
KW   Human; RECAP; receptors and associated proteins; cerebroprotective;
KW   nootropic; neuroprotective; anticonvulsant; antiparkinsonian; anti-HIV;
KW   antidiabetic; immunostimulant; immunomodulator; antiinflammatory;
KW   antithyroid; immunosuppressive; nephrotropic; antigout; thyromimetic;
KW   cytostatic; antibacterial; virucide; fungicide; protozoacide;
KW   antiarteriosclerotic; hepatotropic; gene therapy; infection; cancer; ss.
XX
OS   Homo sapiens.
XX
```

PN WO200107612-A2.
XX
PD 01-FEB-2001.
XX
PF 21-JUL-2000; 2000WO-US20035.
XX
PR 21-JUL-1999; 99US-0145232.
PR 07-OCT-1999; 99US-0158578.
PR 12-NOV-1999; 99US-0165192.
XX
PA (INCY-) INCYTE GENOMICS INC.
XX
PI Au-Young J, Bandman O, Tang YT, Yue H, Azimzai Y, Burford N;
PI Baughn MR, Lu DAM, Hillman JL, Patterson C, Lal P;
XX
DR WPI; 2001-168554/17.
DR P-PSDB; AAB68887.
XX
PT Novel receptors and associated proteins for diagnosis and treatment of
PT neurological disorders, immunological disorders including autoimmune/
PT inflammatory disorders and cell proliferative disorders such as cancer
PT -
XX
PS Claim 5; Page 124-125; 128pp; English.
XX
CC The present sequence encodes a human RECAP (receptors and associated
CC proteins) polypeptide. RECAP polynucleotides and polypeptides are useful
CC in the diagnosis, treatment and prevention of neurological disorders
CC such as stroke, Alzheimer's disease, Pick's disease, Huntington's
CC disease, dementia, Parkinson's disease, Downs's syndrome, amyotrophic
CC lateral sclerosis, multiple sclerosis, bacterial and viral meningitis,
CC CJD (Creutzfeldt-Jakob disease), GSS (Gerstmann -Straussler-Scheinker
CC syndrome); immunological disorders, including autoimmune/inflammatory
CC disorders such as AIDS, DiGeorge's syndrome, severe combined
CC immunodeficiency disease (SCID), Chediak-Higashi syndrome, Cushing's
CC disease, Addison's disease, autoimmune thyroiditis, Crohn's disease,
CC diabetes mellitus, Good pasture's syndrome, gout, Grave's diseases,
CC Hashimoto's thyroiditis, Sjogren's syndrome, Werner's syndrome, viral,
CC bacterial, fungal, parasitic, protozoal, and helminthic infections; and
CC cell proliferation disorders such as arteriosclerosis, atherosclerosis,
CC cirrhosis, hepatitis and cancer.
XX
SQ Sequence 1820 BP; 534 A; 433 C; 471 G; 382 T; 0 other;

Query Match 2.3%; Score 45.2; DB 22; Length 1820;
Best Local Similarity 45.3%; Pred. No. 0.083;
Matches 164; Conservative 0; Mismatches 198; Indels 0; Gaps 0;

Qy 507 GAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGGA 566
Db 637 gaagaggcagttctccatctgccatgatgagaatgaccagctccgcaacaagattgatga 696

Qy 567 GGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAG 626
Db 697 gctggaagaacaatgcagtgagatcaacagagagaaggagaagaacacgcagctgaagag 756

Qy 627 CCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTGGA 686
Db 757 gaggatcgaggagctggaggcagagctccgagaaaaggagacagagctgaaagatctccg 816

Qy 687 ACAGCTGGCTGTGTACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCACG 746
Db 817 aaaacaaagtgaaatcatacctcagctcatgtcagagtgcgaatatgtctctgagaagct 876

Qy 747 GAAGGCCTCAGGGGAGGTGGCTGACAAGCTGAGGAAGGATTTGTTTTCCTCCAGAAGCAA 806
Db 877 agaggcggcagagagagacaatcaaaacctggaagacaaagtgcgttccttaaagacaga 936

Qy 807 GTTGCAGACAGTCTACTCTGAATTGGATCAGGCCAAGTTAGAACTGAAGTCAGCCCAGAA 866
Db 937 cattgaggagagcaaataccgacagcgccacctgaaggtggagttgaagagcttcctgga 996

Qy 867 GG 868
Db 997 gg 998

RESULT 29
AAS81488/c
ID AAS81488 standard; cDNA; 1824 BP.
XX
AC AAS81488;
XX
DT 13-FEB-2002 (first entry)
XX
DE DNA encoding novel human diagnostic protein #17292.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US08631.
XX
PR 31-MAR-2000; 2000US-0540217.
PR 23-AUG-2000; 2000US-0649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR P-PSDB; ABG17301.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity -
XX
PS Claim 1; SEQ ID No 17292; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC and gene mapping, and in recombinant production of (II). The
CC polynucleotides are also used in diagnostics as expressed sequence tags
CC for identifying expressed genes. (I) is useful in gene therapy techniques
CC to restore normal activity of (II) or to treat disease states involving
CC (II). (II) is useful for generating antibodies against it, detecting or
CC quantitating a polypeptide in tissue, as molecular weight markers and as
CC a food supplement. (II) and its binding partners are useful in medical
CC imaging of sites expressing (II). (I) and (II) are useful for treating
CC disorders involving aberrant protein expression or biological activity.
CC The polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. AAS64197-AAS94564 represent novel human
CC diagnostic coding sequences of the invention.
CC Note: The sequence data for this patent did not appear in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 1824 BP; 270 A; 670 C; 359 G; 525 T; 0 other;

Query Match 2.2%; Score 45; DB 23; Length 1824;
Best Local Similarity 47.7%; Pred. No. 0.095;
Matches 132; Conservative 0; Mismatches 145; Indels 0; Gaps 0;

Qy 507 GAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGGA 566

```
Db    775 GGAGAGGCTGCTGGAAGAGGTGGAGAAGCTGTTAGAACAGGAGAGGCAGCAGGAGGAGCA 716

Qy    567 GGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAG 626

Db    715 GGAGAGGCTGCTGGAGAGGGAGAGGCTGCTGGAAGAGGTGGAGAAGCTGTTAGAACAGGA 656

Qy    627 CCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTGGA 686

Db    655 GAGGCGGCAGGAGGAGCAGGAGAGGCTGCTGGAGAGGGAGAGGCTGCTGGACGAGGTGGA 596

Qy    687 ACAGCTGGCTGTGTACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCACG 746

Db    595 GGAGCTCCTGGACGAGGTGGAGGAGCTCCTGGAGCAGGAGAGGCTTCGGCAACAGGATGA 536

Qy    747 GAAGGCCTCAGGGGAGGTGGCTGACAAGCTGAGGAAG 783

Db    535 GAGGCTGTGGCAGCAGGAGACTCTGCAGGAGCTGGAG 499
```

RESULT 30
AAS79695
ID AAS79695 standard; cDNA; 2850 BP.
XX
AC AAS79695;
XX
DT 13-FEB-2002 (first entry)
XX
DE DNA encoding novel human diagnostic protein #15499.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US08631.
XX
PR 31-MAR-2000; 2000US-0540217.
PR 23-AUG-2000; 2000US-0649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR P-PSDB; ABG15508.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity -
XX
PS Claim 1; SEQ ID No 15499; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC and gene mapping, and in recombinant production of (II). The
CC polynucleotides are also used in diagnostics as expressed sequence tags
CC for identifying expressed genes. (I) is useful in gene therapy techniques
CC to restore normal activity of (II) or to treat disease states involving
CC (II). (II) is useful for generating antibodies against it, detecting or
CC quantitating a polypeptide in tissue, as molecular weight markers and as
CC a food supplement. (II) and its binding partners are useful in medical
CC imaging of sites expressing (II). (I) and (II) are useful for treating
CC disorders involving aberrant protein expression or biological activity.
CC The polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. AAS64197-AAS94564 represent novel human
CC diagnostic coding sequences of the invention.
CC Note: The sequence data for this patent did not appear in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 2850 BP; 747 A; 692 C; 937 G; 474 T; 0 other;

Query Match 2.2%; Score 45; DB 23; Length 2850;
Best Local Similarity 47.7%; Pred. No. 0.12;
Matches 132; Conservative 0; Mismatches 145; Indels 0; Gaps 0;

```
Qy    507 GAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGGA 566

Db   1050 ggagaggctgctggaagaggtggagaagctgttagaacaggagaggcagcaggaggagca 1109

Qy    567 GGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAG 626

Db   1110 ggagaggctgctggagagggagaggctgctggaagaggtggagaagctgttagaacagga 1169

Qy    627 CCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTGGA 686

Db   1170 gaggcggcaggaggagcaggagaggctgctggagagggagaggctgctggacgaggtgga 1229

Qy    687 ACAGCTGGCTGTGTACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCACG 746

Db   1230 ggagctcctggacgaggtggaggagctcctggagcaggagaggcttcggcaacaggatga 1289

Qy    747 GAAGGCCTCAGGGGAGGTGGCTGACAAGCTGAGGAAG 783

Db   1290 gaggctgtggcagcaggagactctgcaggagctggag 1326
```

RESULT 31
AAK19599/c
ID AAK19599 standard; DNA; 267 BP.
XX
AC AAK19599;
XX
DT 05-NOV-2001 (first entry)
XX
DE Human brain expressed single exon probe SEQ ID NO: 19590.
XX
KW Human; brain expressed exon; gene expression analysis; probe;
KW microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
KW epilepsy; cancer; ss.
XX
OS Homo sapiens.
XX
PN WO200157275-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US00667.
XX
PR 04-FEB-2000; 2000US-0180312.
PR 26-MAY-2000; 2000US-0207456.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-483446/52.
XX
PT Single exon nucleic acid probes for analyzing gene expression in human
PT brains -

```
XX
PS   Example 4; SEQ ID NO: 19590; 650pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   brain. They can be used to measure gene expression in brain cell samples,
CC   which may enable the diagnosis and improved treatment of nervous system
CC   diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC   epilepsy and cancers. The present sequence is one of the probes of the
CC   invention.
XX
SQ   Sequence 267 BP; 3 A; 151 C; 4 G; 109 T; 0 other;


  Query Match             2.2%;  Score 44.4;  DB 22;  Length 267;
  Best Local Similarity   50.8%;  Pred. No. 0.054;
  Matches  131;  Conservative    0;  Mismatches  126;  Indels    1;  Gaps    1;

Qy     528 AGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGGAGCAA 587
           |||| |  || || | |||   ||||| |   | |||||||| | |  ||   ||||| |
Db     258 AGAGGAAAAGGAGAAGGAGGAGAAACAGGTGGAGGAGGAGGGGAGGAGGAGGAGGAGGAG 199

Qy     588 GATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTGGAGGA 647
           || || ||  | |||| ||   |||          ||    ||      |||| ||||||
Db     198 GAGGAGGA-GAAGGAGAAGGAGGAGGAGGAGAAGGAGGAGGAGGAGAAGGAGGAGGAGGA 140

Qy     648 GATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTGGAACAGCTGGCTGTGTACTGTGT 707
           || |      || | ||  | ||   ||   | || |||  ||  ||  | | |
Db     139 GAAGGAGGAGGAGAAGGAGGAGGAGGAGAAGGAGGAGGAGGAGAAGGAGGAGGAGGAGAA 80

Qy     708 GTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCACGGAAGGCCTCAGGGGAGGTGGC 767
           |       || | ||| | ||| |        |||    | |||     | ||||| ||
Db      79 GGAGGAGGAGGAGGAGAAGGAGGAGGAGGTGAAGGAGGAGGAGGAGGAGGAGGAGGAGGA 20

Qy     768 TGACAAGCTGAGGAAGGA 785
             | |||   | ||||||
Db      19 GAAGAAGAAAAAGAAGGA 2


RESULT  32
AAK45604/c
ID   AAK45604 standard; DNA; 267 BP.
XX
AC   AAK45604;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human bone marrow expressed single exon probe SEQ ID NO: 20161.
XX
KW   Human; bone marrow expressed exon; gene expression analysis; probe;
KW   microarray; cancer; leukaemia; lymphoma; myeloma; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157276-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00668.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488900/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human bone marrow -
XX
PS   Example 4; SEQ ID NO: 20161; 658pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   bone marrow. They can be used to measure gene expression in bone marrow
CC   samples, which may enable the improved diagnosis and treatment of cancers
CC   such as lymphoma, leukaemia and myeloma. The present sequence is one of
CC   the probes of the invention.
XX
SQ   Sequence 267 BP; 3 A; 151 C; 4 G; 109 T; 0 other;


  Query Match             2.2%;  Score 44.4;  DB 22;  Length 267;
  Best Local Similarity   50.8%;  Pred. No. 0.054;
  Matches  131;  Conservative    0;  Mismatches  126;  Indels    1;  Gaps    1;

Qy     528 AGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGGAGCAA 587
           |||| |  || || | |||   ||||| |   | |||||||| | |  ||   ||||| |
Db     258 AGAGGAAAAGGAGAAGGAGGAGAAACAGGTGGAGGAGGAGGGGAGGAGGAGGAGGAGGAG 199

Qy     588 GATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTGGAGGA 647
           || || ||  | |||| ||   |||          ||    ||      |||| ||||||
Db     198 GAGGAGGA-GAAGGAGAAGGAGGAGGAGGAGAAGGAGGAGGAGGAGAAGGAGGAGGAGGA 140

Qy     648 GATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTGGAACAGCTGGCTGTGTACTGTGT 707
           || |      || | ||  | ||   ||   | || |||  ||  ||  | | |
Db     139 GAAGGAGGAGGAGAAGGAGGAGGAGGAGAAGGAGGAGGAGGAGAAGGAGGAGGAGGAGAA 80

Qy     708 GTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCACGGAAGGCCTCAGGGGAGGTGGC 767
           |       || | ||| | ||| |        |||    | |||     | ||||| ||
Db      79 GGAGGAGGAGGAGGAGAAGGAGGAGGAGGTGAAGGAGGAGGAGGAGGAGGAGGAGGAGGA 20

Qy     768 TGACAAGCTGAGGAAGGA 785
             | |||   | ||||||
Db      19 GAAGAAGAAAAAGAAGGA 2


RESULT  33
AAS74240
ID   AAS74240 standard; cDNA; 693 BP.
XX
AC   AAS74240;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #10044.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG10053.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
```

PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity -
XX
PS Claim 1; SEQ ID No 10044; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC and gene mapping, and in recombinant production of (II). The
CC polynucleotides are also used in diagnostics as expressed sequence tags
CC for identifying expressed genes. (I) is useful in gene therapy techniques
CC to restore normal activity of (II) or to treat disease states involving
CC (II). (II) is useful for generating antibodies against it, detecting or
CC quantitating a polypeptide in tissue, as molecular weight markers and as
CC a food supplement. (II) and its binding partners are useful in medical
CC imaging of sites expressing (II). (I) and (II) are useful for treating
CC disorders involving aberrant protein expression or biological activity.
CC The polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. AAS64197-AAS94564 represent novel human
CC diagnostic coding sequences of the invention.
CC Note: The sequence data for this patent did not appear in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 693 BP; 296 A; 79 C; 234 G; 84 T; 0 other;

Query Match 2.2%; Score 44.2; DB 23; Length 693;
Best Local Similarity 48.6%; Pred. No. 0.097;
Matches 121; Conservative 0; Mismatches 128; Indels 0; Gaps 0;

Qy 502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
Db 208 aaagaggagaaggagaagaaggagaaggagaagaaggagaaggagaaggagaagaagagg 267

Qy 562 GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
Db 268 aagaagaagaggaagaagaagaagaagaagaagaagaagaagaagaagaagaagaagaag 327

Qy 622 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG 681
Db 328 aagaagaagaagaagaaggaggaggaggaggaggaggaggaggatgaggaagaggaggag 387

Qy 682 GTGGAACAGCTGGCTGTGTACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAG 741
Db 388 gaggaggaggagaagaagaagaaggagaaggaggagaaggtgaaggagaagaagaaggag 447

Qy 742 GCACGGAAG 750
Db 448 gagaagaag 456

RESULT 34
AAS90715
ID AAS90715 standard; cDNA; 693 BP.
XX
AC AAS90715;
XX
DT 13-FEB-2002 (first entry)
XX
DE DNA encoding novel human diagnostic protein #26519.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US08631.
XX
PR 31-MAR-2000; 2000US-0540217.
PR 23-AUG-2000; 2000US-0649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR P-PSDB; ABG26528.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity -
XX
PS Claim 1; SEQ ID No 26519; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC and gene mapping, and in recombinant production of (II). The
CC polynucleotides are also used in diagnostics as expressed sequence tags
CC for identifying expressed genes. (I) is useful in gene therapy techniques
CC to restore normal activity of (II) or to treat disease states involving
CC (II). (II) is useful for generating antibodies against it, detecting or
CC quantitating a polypeptide in tissue, as molecular weight markers and as
CC a food supplement. (II) and its binding partners are useful in medical
CC imaging of sites expressing (II). (I) and (II) are useful for treating
CC disorders involving aberrant protein expression or biological activity.
CC The polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. AAS64197-AAS94564 represent novel human
CC diagnostic coding sequences of the invention.
CC Note: The sequence data for this patent did not appear in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 693 BP; 296 A; 79 C; 234 G; 84 T; 0 other;

Query Match 2.2%; Score 44.2; DB 23; Length 693;
Best Local Similarity 48.6%; Pred. No. 0.097;
Matches 121; Conservative 0; Mismatches 128; Indels 0; Gaps 0;

Qy 502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
Db 208 aaagaggagaaggagaagaaggagaaggagaagaaggagaaggagaaggagaagaagagg 267

Qy 562 GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
Db 268 aagaagaagaggaagaagaagaagaagaagaagaagaagaagaagaagaagaagaagaag 327

Qy 622 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG 681
Db 328 aagaagaagaagaagaaggaggaggaggaggaggaggaggaggatgaggaagaggaggag 387

Qy 682 GTGGAACAGCTGGCTGTGTACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAG 741
Db 388 gaggaggaggagaagaagaagaaggagaaggaggagaaggtgaaggagaagaagaaggag 447

Qy 742 GCACGGAAG 750
Db 448 gagaagaag 456

RESULT 35
AAX83007/c

```
ID   AAX83007 standard; DNA; 51259 BP.
XX
AC   AAX83007;
XX
DT   31-AUG-1999  (first entry)
XX
DE   Partial mouse WRN genomic sequence #3.
XX
KW   Mouse; WRN; Werner's syndrome; detection; diagnosis; autosomal;
KW   recessive disorder; phenotype; ss.
XX
OS   Mus musculus.
XX
PN   WO9724435-A1.
XX
PD   10-JUL-1997.
XX
PF   30-DEC-1996;   96WO-US20785.
XX
PR   12-APR-1996;   96US-0632175.
PR   29-DEC-1995;   95US-0009409.
PR   29-DEC-1995;   95US-0580539.
PR   30-JAN-1996;   96US-0010835.
PR   30-JAN-1996;   96US-0594242.
XX
PA   (DARW-) DARWIN MOLECULAR CORP.
PA   (OSHI/) OSHIMA J.
XX
PI   Fu Y,  Mulligan J,  Oshima J,  Schellenberg GD,  Yu C;
XX
DR   WPI; 1997-363671/33.
XX
PT   Isolated nucleic acid molecule encoding the WRN gene product -
PT   useful for detection and treatment of Werner's syndrome, and related
PT   diseases
XX
PS   Claim 1; Fig 7; 153pp; English.
XX
CC   This sequence represents a fragment of the genomic sequence containing
CC   the coding region for the mouse WRN gene (AAX83004).  The corresponding
CC   human gene (AAX83001) encodes a protein related to Werner's syndrome.
CC   The products can be used for the detection and treatment of Werner's
CC   syndrome (WS), an autosomal recessive disorder with a complex phenotype,
CC   as well as related diseases.
XX
SQ   Sequence 51259 BP; 14533 A; 9635 C; 10266 G; 16825 T; 0 other;


  Query Match             2.2%;  Score 44.2;  DB 18;  Length 51259;
  Best Local Similarity   47.9%;  Pred. No. 0.8;
  Matches  127;  Conservative    0;  Mismatches  138;  Indels    0;  Gaps    0;

Qy     506 TGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGG 565
           |||| ||| ||  | || |    ||| || || |||| |||    |  | |  || ||||
Db     267 TGAAGAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGCAGGAGG 208

Qy     566 AGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGA 625
           ||| ||          |    ||  |||||    |||||||   |||        |||
Db     207 AGGAGGAGGAAGAGGAGGAGGAGGAGAAGAAGGAGGAGCAGGAGGAGGAGGAGCAGG 148

Qy     626 GCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTGG 685
           ||       ||| |||| ||  ||     || | ||  | |    ||   | || ||
Db     147 AGGAGGAGGAGAAGGAGGAGAAGGAGAAGGAGGAGAAGGAGGGGCAGGAGGAGGAGGAGG 88

Qy     686 AACAGCTGGCTGTGTACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCAC 745
           |  ||  ||  | | |       |   |   || | ||| | ||| |     | |||
Db      87 AGGAGGAGGAGGAGCAGGAGCAGGAACAGGAGCAGGAGGAGGAGGAGGAGCAGGAGCAGG 28

Qy     746 GGAAGGCCTCAGGGGAGGTGGCTGA 770
           | |||       ||||| ||  ||
Db      27 AGCAGGAGGAGCAGGAGGAGGAGGA 3
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RESULT  36
ABL10151
ID   ABL10151 standard; cDNA; 2601 BP.
XX
AC   ABL10151;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Drosophila melanogaster expressed polynucleotide SEQ ID NO 24935.
XX
KW   Drosophila; developmental biology; cell signalling; insecticide;
KW   pharmaceutical; gene; ss.
XX
OS   Drosophila melanogaster.
XX
PN   WO200171042-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-US09231.
XX
PR   23-MAR-2000; 2000US-191637P.
PR   11-JUL-2000; 2000US-0614150.
XX
PA   (PEKE ) PE CORP NY.
XX
PI   Venter JC,  Adams M,  Li PWD,  Myers EW;
XX
DR   WPI; 2001-656860/75.
DR   P-PSDB; ABB66048.
XX
PT   New isolated nucleic acid detection reagent for detecting 1000 or more
PT   genes from Drosophila and for elucidating cell signalling and cell-cell
PT   interactions -
XX
PS   Claim 1; SEQ ID NO 24935; 21pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated nucleic acid detection reagent
CC   capable of detecting 1000 or more genes from Drosophila. The invention is
CC   useful in developmental biology and in elucidating cell signalling and
CC   cell-cell interactions in higher eukaryotes for the development of
CC   insecticides, therapeutics and pharmaceutical drugs. The invention
CC   discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
CC   sequences (ABL01840-ABL16175) and the encoded proteins
CC   (ABB57737-ABB72072).
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 2601 BP; 780 A; 639 C; 759 G; 423 T; 0 other;


  Query Match             2.2%;  Score 44;  DB 23;  Length 2601;
  Best Local Similarity   47.8%;  Pred. No. 0.21;
  Matches  128;  Conservative    0;  Mismatches  140;  Indels    0;  Gaps    0;

Qy     403 CAGGTCATCATCGACACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCT 462
           |||  || ||  |     |||| ||| | || | | ||   | ||      |     ||
Db    1693 cagcacaccaaggctgaactgctggacaagcggaaggagaacgatcggcacgccaagtcg 1752

Qy     463 CTGCAGCAGGCCTTGGGCAAGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAG 522
           |||||  ||| |  |   |||   | |   ||| ||       || | || | ||||||
Db    1753 ctgcaagaggacgagcagaagctggcgcgcctgcgcaaggatgtggacaacctgatgaac 1812

Qy     523 TACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGG 582
           |     |   |      | | |   |   ||    | ||||||   |  || |||| |
Db    1813 gagaagaatgcgattagtgcggcgctgaccaaacgcaacgaggagttcgatcgactcaag 1872

Qy     583 AGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTG 642
             ||    | ||| | || |   | |  |   ||    |||||| |||  |    ||
Db    1873 cacagccaggagaacctgcaaacggtgtacgatcagacccagaggcagtgcagccagtat 1932

Qy     643 GAGGAGATGATCCGAGACATGGGTGTGG 670
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          ||||    || ||    ||||| ||||
Db   1933 caggatgatatgcgtctaatgggcgtgg 1960


RESULT 37
AAQ84589
ID   AAQ84589 standard; cDNA to mRNA; 2887 BP.
XX
AC   AAQ84589;
XX
DT   01-SEP-1995  (first entry)
XX
DE   AMML chromosome inv(16).
XX
KW   AMML; acute myelomonocytic leukemia; chromosome-16; inversion;
KW   inv(16); CBF-beta; CBFB gene; transcription factor; myosin; MYH11;
KW   SMMHC; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             1..2661
FT                   /*tag=  a
FT   misc_feature    492
FT                   /*tag=  b
FT                   /note= "inv(16) breakpoint; CBFB nt 1-492 fused
FT                          to nt 994 of MYH11"
XX
PN   WO9504067-A.
XX
PD   09-FEB-1995.
XX
PF   26-JUL-1994;   94WO-US08530.
XX
PR   29-JUL-1993;   93US-0099869.
XX
PA   (UNMI ) UNIV MICHIGAN.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Claxton D,  Collins FS,  Liu P,  Siciliano MJ;
XX
DR   WPI; 1995-082178/11.
DR   P-PSDB; AAR66930.
XX
PT   Novel DNA spanning the pericentric inversion of chromosome 16 -
PT   for the screening of acute myeloid leukaemia
XX
PS   Claim 1; Page 34-38; 78pp; English.
XX
CC   PCR was performed on total cellular RNA from 5 AMML patients having
CC   a pericentric inversion of chromosome-16, M4Eo subtype.  Sequencing
CC   showed the inv(16) fusion to comprise a sequence from the CBFB
CC   gene, encoding a novel transcription factor, and the MYH11 gene,
CC   encoding smooth muscle myosin heavy chain.  In 1 patient, nt 1-492
CC   of the CBFB gene were fused to nt 994 of MYH11 (shown in AAQ84589;
CC   predicted aa sequence in AAR66930).  Probes specific for inv(16) can
CC   be used for diagnosis of AMML.
XX
SQ   Sequence 2887 BP; 868 A; 702 C; 940 G; 377 T; 0 other;


  Query Match             2.2%;  Score 44;  DB 16;  Length 2887;
  Best Local Similarity   47.2%;  Pred. No. 0.22;
  Matches  134;  Conservative    0;  Mismatches  150;  Indels    0;  Gaps    0;

Qy     530 AGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGGAGCAAGA 589
           || |  |||||     |   ||| |      |||   ||| ||   |||  ||  |  |
Db     512 agaataagcagacgctggagaaagagaacgcagacctggccggggagctgcgggtcctgg 571

Qy     590 TGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTGGAGGAGA 649
             || ||| | || || | || | |       |||  | |    |  ||||| |||||
Db     572 gccaggccaagcaggaggtggaacataagaagaagaagctggaggcgcaggtgcaggagc 631

Qy     650 TGATCCGAGACATGGGTGTGGGACAGTCAGCGGTGGAACAGCTGGCTGTGTACTGTGTGT 709
           ||       |     | |  ||  ||   ||   ||   ||||   ||   |
Db     632 tgcagtccaagtgcagcgatggggagcgggcccgggcggagctcaatgacaaagtccaca 691

Qy     710 CTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCACGGAAGGCCTCAGGGGAGGTGGCTG 769
             ||  |||| ||    ||||   | | || |   |  || |   | | || |  |||
Db     692 agctgcagaatgaagttgagagcgtcacagggatgcttaacgaggccgaggggaaggcca 751

Qy     770 ACAAGCTGAGGAAGGATTTGTTTTCCTCCAGAAGCAAGTTGCAG 813
           ||||||   |||||  ||   |||  |||   | || | |||
Db     752 ttaagctggccaaggacgtggcgtccctcagttcccagctccag 795


RESULT 38
ABL10150
ID   ABL10150 standard; cDNA; 4945 BP.
XX
AC   ABL10150;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Drosophila melanogaster expressed polynucleotide SEQ ID NO 24932.
XX
KW   Drosophila; developmental biology; cell signalling; insecticide;
KW   pharmaceutical; gene; ss.
XX
OS   Drosophila melanogaster.
XX
PN   WO200171042-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-US09231.
XX
PR   23-MAR-2000; 2000US-191637P.
PR   11-JUL-2000; 2000US-0614150.
XX
PA   (PEKE ) PE CORP NY.
XX
PI   Venter JC,  Adams M,  Li PWD,  Myers EW;
XX
DR   WPI; 2001-656860/75.
DR   P-PSDB; ABB66047.
XX
PT   New isolated nucleic acid detection reagent for detecting 1000 or more
PT   genes from Drosophila and for elucidating cell signalling and cell-cell
PT   interactions -
XX
PS   Claim 1; SEQ ID NO 24932; 21pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated nucleic acid detection reagent
CC   capable of detecting 1000 or more genes from Drosophila. The invention is
CC   useful in developmental biology and in elucidating cell signalling and
CC   cell-cell interactions in higher eukaryotes for the development of
CC   insecticides, therapeutics and pharmaceutical drugs. The invention
CC   discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
CC   sequences (ABL01840-ABL16175) and the encoded proteins
CC   (ABB57737-ABB72072).
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 4945 BP; 1373 A; 1192 C; 1280 G; 1100 T; 0 other;


  Query Match             2.2%;  Score 44;  DB 23;  Length 4945;
  Best Local Similarity   47.8%;  Pred. No. 0.29;
  Matches  128;  Conservative    0;  Mismatches  140;  Indels    0;  Gaps    0;

Qy     403 CAGGTCATCATCGACACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCT 462
           |||  || ||  |     |||| ||| | || | | ||   | ||      |     ||
Db    2980 cagcacaccaaggctgaactgctggacaagcggaaggagaacgatcggcacgccaagtcg 3039
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Qy    463 CTGCAGCAGGCCTTGGGCAAGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAG 522
          |||||  ||| |  |   |||   | |   ||| ||       || | || | ||||||
Db   3040 ctgcaagaggacgagcagaagctggcgcgcctgcgcaaggatgtggacaacctgatgaac 3099

Qy    523 TACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGG 582
          |     |   |       |  | |   |   ||    | ||||||   |  || |||| |
Db   3100 gagaagaatgcgattagtgcggcgctgaccaaacgcaacgaggagttcgatcgactcaag 3159

Qy    583 AGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTG 642
            ||    | ||| | || |   | |  |   ||    ||||||  |||  |    ||
Db   3160 cacagccaggagaacctgcaaacggtgtacgatcagacccagaggcagtgcagccagtat 3219

Qy    643 GAGGAGATGATCCGAGACATGGGTGTGG 670
          ||||    || ||    ||||| ||||
Db   3220 caggatgatatgcgtctaatgggcgtgg 3247


RESULT  39
ABL10438
ID   ABL10438 standard; cDNA; 5064 BP.
XX
AC   ABL10438;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Drosophila melanogaster expressed polynucleotide SEQ ID NO 25796.
XX
KW   Drosophila; developmental biology; cell signalling; insecticide;
KW   pharmaceutical; gene; ss.
XX
OS   Drosophila melanogaster.
XX
PN   WO200171042-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-US09231.
XX
PR   23-MAR-2000; 2000US-191637P.
PR   11-JUL-2000; 2000US-0614150.
XX
PA   (PEKE ) PE CORP NY.
XX
PI   Venter JC,  Adams M,  Li PWD,  Myers EW;
XX
DR   WPI; 2001-656860/75.
DR   P-PSDB; ABB66335.
XX
PT   New isolated nucleic acid detection reagent for detecting 1000 or more
PT   genes from Drosophila and for elucidating cell signalling and cell-cell
PT   interactions -
XX
PS   Claim 1; SEQ ID NO 25796; 21pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated nucleic acid detection reagent
CC   capable of detecting 1000 or more genes from Drosophila. The invention is
CC   useful in developmental biology and in elucidating cell signalling and
CC   cell-cell interactions in higher eukaryotes for the development of
CC   insecticides, therapeutics and pharmaceutical drugs. The invention
CC   discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
CC   sequences (ABL01840-ABL16175) and the encoded proteins
CC   (ABB57737-ABB72072).
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 5064 BP; 1227 A; 1276 C; 1192 G; 1369 T; 0 other;


  Query Match             2.2%;  Score 44;  DB 23;  Length 5064;
  Best Local Similarity   47.8%;  Pred. No. 0.29;
  Matches  128;  Conservative    0;  Mismatches  140;  Indels    0;  Gaps    0;

Qy    403 CAGGTCATCATCGACACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCT 462
          |||  || ||  |     |||| ||| | || | | ||   | ||      |     ||
Db     10 cagcacaccaaggctgaactgctggacaagcggaaggagaacgatcggcacgccaagtcg 69

Qy    463 CTGCAGCAGGCCTTGGGCAAGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAG 522
          |||||  ||| |  |   |||   | |   ||| ||       || | || | ||||||  .
Db     70 ctgcaagaggacgagcagaagctggcgcgcctgcgcaaggatgtggacaacctgatgaac 129

Qy    523 TACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGG 582
          |     |   |       |  | |   |   ||    | ||||||   |  || |||| |
Db    130 gagaagaatgcgattagtgcggcgctgaccaaacgcaacgaggagttcgatcgactcaag 189

Qy    583 AGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTG 642
            ||    | ||| | || |   | |  |   ||    ||||||  |||  |    ||
Db    190 cacagccaggagaacctgcaaacggtgtacgatcagacccagaggcagtgcagccagtat 249

Qy    643 GAGGAGATGATCCGAGACATGGGTGTGG 670
          ||||    || ||    ||||| ||||
Db    250 caggatgatatgcgtctaatgggcgtgg 277


RESULT  40
AAX83006/c
ID   AAX83006 standard; DNA; 16442 BP.
XX
AC   AAX83006;
XX
DT   31-AUG-1999  (first entry)
XX
DE   Partial mouse WRN genomic sequence #2.
XX
KW   Mouse; WRN; Werner's syndrome; detection; diagnosis; autosomal;
KW   recessive disorder; phenotype; ss.
XX
OS   Mus musculus.
XX
PN   WO9724435-A1.
XX
PD   10-JUL-1997.
XX
PF   30-DEC-1996;   96WO-US20785.
XX
PR   12-APR-1996;   96US-0632175.
PR   29-DEC-1995;   95US-0009409.
PR   29-DEC-1995;   95US-0580539.
PR   30-JAN-1996;   96US-0010835.
PR   30-JAN-1996;   96US-0594242.
XX
PA   (DARW-) DARWIN MOLECULAR CORP.
PA   (OSHI/) OSHIMA J.
XX
PI   Fu Y,  Mulligan J,  Oshima J,  Schellenberg GD,  Yu C;
XX
DR   WPI; 1997-363671/33.
XX
PT   Isolated nucleic acid molecule encoding the WRN gene product  -
PT   useful for detection and treatment of Werner's syndrome, and related
PT   diseases
XX
PS   Claim 1; Fig 7; 153pp; English.
XX
CC   This sequence represents a fragment of the genomic sequence containing
CC   the coding region for the mouse WRN gene (AAX83004).  The corresponding
CC   human gene (AAX83001) encodes a protein related to Werner's syndrome.
CC   The products can be used for the detection and treatment of Werner's
CC   syndrome (WS), an autosomal recessive disorder with a complex phenotype,
CC   as well as related diseases.
XX
SQ   Sequence 16442 BP; 4392 A; 2975 C; 3408 G; 5665 T; 2 other;


  Query Match             2.2%;  Score 43.6;  DB 18;  Length 16442;
  Best Local Similarity   47.4%;  Pred. No. 0.67;
```

Matches 130; Conservative 0; Mismatches 144; Indels 0; Gaps 0;

```
Qy     512 AGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAGGAGGCGG 571
           |||||  | || |    |||||| || |||| |||    | || |  || ||||||| ||
Db   16440 AGCAGGAGGAGGAGCAGGAGCAGGAGGAGGAGGAGGAGCAGGAGCAGGAGGAGGAGG 16381

Qy     572 GCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGC 631
             ||    |    ||  | ||     | || ||   |||   |      ||    ||
Db   16380 AGGAGCAGGAGCAGGAGCAGGAGGAGGAGCAGGAGCAGGAGGAGCAGGAGGAGGAGGAGG 16321

Qy     632 TCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTGGAACAGC 691
             |  |||| | |||||  |       ||   ||  | ||  |||     || |||  ||
Db   16320 AGCAGGAGGAGCAGGAGGAGGAGGAGGAGCAGGAGGAGGAGCAGGAGCAGGAGGAGGAGG 16261

Qy     692 TGGCTGTGTACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCACGGAAGG 751
             |   | | |    | |       || | ||| | ||| |     | ||||    | ||
Db   16260 AGCAGGAGGAGCAGGAGGAGGAGGAGCAGGAGCAGGAGGAGGAGGAGGAGGAGGAGT 16201

Qy     752 CCTCAGGGGAGGTGGCTGACAAGCTGAGGAAGGA 785
             | | ||  |    | |||  || |||| |
Db   16200 AGAAGGAGAAGAAGAAGAAGAAGAAGAAGAA 16167
```

Search completed: September 4, 2002, 14:00:32
Job time: 9036 sec